

**H.R. 1005, H.R. 1723, H.R. 2707  
and H.R. 2766**

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**LEGISLATIVE HEARING**

BEFORE THE  
SUBCOMMITTEE ON FORESTS AND  
FOREST HEALTH  
OF THE  
COMMITTEE ON RESOURCES  
U.S. HOUSE OF REPRESENTATIVES  
ONE HUNDRED EIGHTH CONGRESS  
FIRST SESSION

Thursday, July 24, 2003

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**LEGISLATIVE HEARING ON H.R. 2766, TO  
DIRECT THE SECRETARY OF AGRICULTURE  
TO EXCHANGE CERTAIN LANDS WITHIN  
THE ARAPAHO AND ROOSEVELT NATIONAL  
FOREST IN THE STATE OF COLORADO;  
H.R. 1723, TO DESIGNATE CERTAIN  
NATIONAL FOREST SYSTEM LANDS IN THE  
COMMONWEALTH OF PUERTO RICO AS  
COMPONENTS OF THE NATIONAL WILDER-  
NESS PRESERVATION SYSTEM, AND FOR  
OTHER PURPOSES; H.R. 1005, TO PROVIDE  
PERMANENT FUNDING FOR THE PAYMENT  
IN LIEU OF TAXES PROGRAM, AND FOR  
OTHER PURPOSES; AND H.R. 2707, TO  
DIRECT THE SECRETARIES OF THE INTE-  
RIOR AND AGRICULTURE, ACTING  
THROUGH THE U.S. FOREST SERVICE, TO  
CARRY OUT A DEMONSTRATION PROGRAM  
TO ASSESS POTENTIAL WATER SAVINGS  
THROUGH CONTROL OF SALT CEDAR AND  
RUSSIAN OLIVE ON FORESTS AND PUBLIC  
LANDS ADMINISTERED BY THE DEPART-  
MENT OF THE INTERIOR AND THE U.S. FOR-  
EST SERVICE.**

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**Thursday, July 24, 2003  
U.S. House of Representatives  
Subcommittee on Forests and Forest Health  
Committee on Resources  
Washington, DC**

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The Subcommittee met, pursuant to notice, at 9:07 a.m., in room 1334, Longworth House Office Building, Hon. Scott McInnis, [Chairman of the Subcommittee] presiding.

Present: Representatives McInnis, Rehberg, Renzi, Pearce, and Mark Udall.

Also present: Representatives Cannon and Beauprez.

**STATEMENT OF THE HONORABLE SCOTT McINNIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO**

Mr. McINNIS. The Subcommittee on Forests and Forest Health will come to order.

The Subcommittee is meeting today to hear testimony on H.R. 2766, Arapaho and Roosevelt National Forests Land Exchange Act of 2003; H.R. 1723, the Caribbean National Forest Act of 2003; H.R. 1005, PILT and Refuge Revenue Sharing Permanent Funding Act; and H.R. 2707, Salt Cedar and Russian Olive Control Demonstration Act.

I would ask unanimous consent that our fellow members could have permission to sit on the dais. No objection, so ordered.

I have no opening statements at this point, though I may offer some as we proceed. And Mr. Inslee may have an opening statement when he comes in at a later point as well.

I would like to move quickly to our first bill. I would like to explain to our guests, I know a number of you have traveled a great distance. I appreciate very much you taking the time to come to the Committee hearing today. I would advise you that the lack of attendance here is pretty typical. We have lots of conflicts. On top of that, we are competing with the House of Representatives, which met until about 2:30 this morning. So I would guess that there are still some people out there trying to catch a snooze because we are supposed to work that kind of night tonight as well.

But, regardless, the important thing here is not so much what is heard today, although that is important to our members; it is also what goes in the permanent record. So I do appreciate your participation.

Mr. McINNIS. I would like to introduce our witnesses for H.R. 2766 on panel one. We have the Honorable Bob Beauprez, District of Colorado. Bob, thank you so much, and I know that you didn't get much sleep last night either—Elizabeth Estill—Elizabeth, thanks. Nice to see you again—Deputy Chief, Programs, Legislation, and Communications, U.S. Forest Service; And Charles Baroch, the mayor of the city of Golden, State of Colorado.

If you would like to take the seats up there.

I remind all members and all people in the audience, if you have a cell phone, to avoid the wrath of the Chairman, turn it off or put it on vibrate. Second of all, we do allow our witnesses and our members 5 minutes. We try to adhere to that in order to give other people their time that they have requested as well.

Mr. Beauprez, thank you again for coming, and I am going to let you proceed. You may begin.

**STATEMENT OF HON. BOB BEAUPREZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO**

Mr. BEAUPREZ. Thank you, Mr. Chairman, and thank you for holding this hearing today. I appear before you today in support of my bill, H.R. 2766, which authorizes and directs a small land ex-

change between my constituents, the city of Golden, and the United States Forest Service. Before I go any further, I would like to also thank Congressmen Udall and Tancredo, who have graciously cosponsored H.R. 2766 with me. That would be Congressman Mark Udall.

Two of the three land exchange parcels in the bill are in Mr. Udall's district, and our staffs have worked closely to get this legislation introduced and expedited forward. The legislation also has been endorsed by Clear Creek, Park, and Summit Counties in Colorado, the Continental Divide Trail Alliance, the city of Black Hawk Public Works Department, and the Georgetown Loop Railroad, and I would ask, Mr. Chairman, that their letters of support be included in the record of this hearing.

Mr. Chairman, as you are well aware, water shortages in Colorado have been no laughing matter the past several years, and the primary purpose of H.R. 2766 is to enable the city of Golden to expeditiously acquire a nearly 10-acre parcel of national forest land that it needs to help complete a small water storage project near Empire, Colorado. The water storage reservoir itself and the proposed pipeline leading to the reservoir are all located entirely on private land, and the construction of the reservoir was initiated this June.

However, a small 125-foot stretch of the pipeline to service the reservoir must cross national forest land, and both the city of Golden and the Forest Service have agreed that it would be best for all concerned if the city could own the land; hence, this proposed land exchange of H.R. 2766.

Happily, even though the water needs of the city of Golden are my primary reason for introducing H.R. 2766, we have been able to structure this land exchange to also greatly benefit the Forest Service. Those benefits derive from the fact that in return for giving up only 9.84 acres of land that mostly comprise a steep hillside, the Forest Service will acquire up to 80 acres of forest inholdings near Evergreen, Colorado, that are near a popular Forest Service trail head in Cub Creek.

In addition, the Forest Service will also receive a 61-acre donation of surface land from the city that contains part of the route of the Continental Divide National Scenic Trail.

So, Mr. Chairman, not only will this be an equal-value trade of lands, but the Forest Service will gain a significant donation of land over and above equal value and that donation will consolidate national forest holdings along one of the Nation's most popular hiking scenic trails.

Mr. Chairman, I want to emphasize that in making the 61-acre donation along the Continental Divide Trail, the city of Golden is going far beyond what it legally needs to do to have the land exchange meet standard land exchange requirements. I commend the city for going the extra mile to help the Forest Service in its efforts to consolidate its ownership of the route of the Continental Divide Trail. Donating the land to the Forest Service in this case will mean that scarce trail acquisition dollars, which you, Mr. Chairman, and other members of our Colorado delegation have worked extremely hard to get appropriated over the years, can be used in other places.

I would also note that the Argentine Pass area, where the city is donating the land, not only contains the actual route of the Continental Divide Trail itself, but a popular access route to get to the trail, as well as one of several routes used to climb Gray's and Torrey's Peaks, which are perhaps the most visited 14ers in our entire State.

I want to emphasize to the Committee that enactment of this legislation is an urgent matter. Although the city of Golden and other front-range cities appear to have a reprieve this summer from the extreme drought conditions of the past several years, completion of the Empire reservoir project is critical to ensuring that the city has adequate water supplies should the drought return.

To that end, H.R. 2766 provides that if the proposed land exchange cannot be completed for any reason, such as hazardous materials or other title problems with the exchanged land, the Empire parcel will be sold to the city and the sale proceeds used to buy other lands for the Forest Service in accordance with the Sisk Act.

In addition, the bill provides that immediately upon its enactment, the city can begin laying the pipeline across the national forest land this fall without further action required by the Forest Service. As the pipeline will be laid in an existing irrigation ditch and will cross only 125 feet of Forest Service land before going entirely onto private land, I do not think that authority is too much to ask.

In conclusion, Mr. Chairman, thank you again for scheduling the hearing so quickly on this matter. This exchange is a classic win-win for both the citizens of the city of Golden and the Forest Service and the public in general.

I would be glad to answer any questions if you have them, and I yield back.

[The prepared statement of Mr. Beauprez follows:]

**Statement of The Honorable Bob Beauprez, a Representative in Congress  
from the State of Colorado, on H.R. 2766**

Thank you, Mr. Chairman.

Dear Chairman McInnis, Ranking Member Inslee, and Members of the Subcommittee, I appear before you today in support of my bill, H.R. 2766, which authorizes and directs a small land exchange between my constituent, the City of Golden, and the U.S. Forest Service.

Before I go any further, I would like to also thank Congressmen Mark Udall and Tom Tancredo, who have graciously co-sponsored H.R. 2766. Two of the three land exchange parcels in the bill are in Mr. Udall's district and our staffs have worked closely to get this legislation introduced and expedited forward. The legislation has also been endorsed by Clear Creek, Park, and Summit Counties; the Continental Divide Trail Alliance; the City of Black Hawk Public Works Department; and the Georgetown Loop Railroad, and I would ask that their letters of support be included into the record of this hearing.

Mr. Chairman, as you are well aware, water shortages in Colorado have been no laughing matter for the past several years, and the primary purpose of H.R. 2766 is to enable the City of Golden to expeditiously acquire a nearly 10-acre parcel of National Forest land that it needs to help complete a small water storage project near Empire, Colorado. The water storage reservoir itself and the proposed pipeline leading to the reservoir are all located entirely on private land, and construction of the reservoir was initiated in June. However, a small 125-foot stretch of the pipeline to service the reservoir must cross National Forest land, and both the City of Golden and the Forest Service have agreed that it would be best for all concerned if the City could own that land. Hence, the proposed land exchange of H.R. 2766.

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So, Mr. Chairman, not only will this be an equal value trade of lands, but the Forest Service will gain a significant donation of land over and above equal value—and that donation will consolidate National Forest holdings along one of the nation's most popular hiking trails.

Mr. Chairman, I want to emphasize that in making the 61-acre donation along the Continental Divide Trail, the City of Golden is going far beyond what it legally needs to do to have the land exchange meet standard land exchange requirements. I commend the City for going the extra mile to help the Forest Service in its efforts to consolidate its ownership of the route of the Continental Divide Trail. Donating the land to the Forest Service in this case will mean that scarce trail acquisition dollars, which you, Mr. Chairman, and other members of the Colorado Congressional delegation have worked extremely hard to get appropriated over the years, can be used in other places. I would also note that the Argentine Pass area, where the City is donating the land, not only contains the actual route of the Continental Divide Trail itself, but a popular access route to get to the Trail, as well as one of several routes used to climb Grays and Torreys Peaks, which are perhaps the most visited "14ers" in the state.

I want to emphasize to the Committee that enactment of this legislation is an urgent matter. Although Golden and other front range cities appear to have a reprieve this summer from the extreme drought conditions of the past several years, completion of the Empire reservoir project is critical to insuring that the city has adequate water supplies should the drought return. To that end, H.R. 2766 provides that if the proposed land exchange cannot be completed for any reason, such as hazardous materials or other title problems with the exchange land, the Empire parcel will be sold to the City, and the sale proceeds used to buy other lands for the Forest Service in accordance with the Sisk Act. In addition, the bill provides that immediately upon its enactment, the City can begin laying the pipeline across the National Forest land this fall without further action required by the Forest Service.

As the pipeline will be laid in an existing irrigation ditch, and will cross only 125 feet of Forest Service land before going entirely on to private land, I don't think that authority is too much to ask.

In conclusion, Mr. Chairman, thank you again for scheduling a hearing so quickly on this matter, and for working with me, Congressman Udall, Congressman Tancredo, the non-profit Continental Divide Trail Alliance, and numerous others to see that it becomes law at the earliest possible date. This exchange is a classic "win-win" for both the citizens of the City of Golden, the Forest Service, and the public in general.

I would be happy to answer any questions you and Members of the Subcommittee might have.

Thank you again, Mr. Chairman.

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Mr. MCINNIS. Thank you, Mr. Beauprez. Also, I appreciate the personal time you have committed to this and sitting with the Chair and kind of going through the details.

Mr. BEAUPREZ. A pleasure. Thank you.

Mr. MCINNIS. And I want you to know I am still mad at your mayor in Golden for stealing our city manager out of Rifle.

[Laughter.]

Mr. MCINNIS. You got a good guy—Mr. Bestor. He does a very good job, and you have a wonderful community.

Elizabeth, you may proceed, and thank you again for coming. We appreciate, by the way, the close relationship and cooperation we have with the Forest Service.

**STATEMENT OF ELIZABETH ESTILL, DEPUTY CHIEF,  
PROGRAMS, LEGISLATION, AND COMMUNICATIONS, FOREST  
SERVICE, U.S. DEPARTMENT OF AGRICULTURE**

Ms. ESTILL. I really appreciate being here today. I am a former resident of the city of Golden.

I do appreciate the opportunity to testify on behalf of the Department on H.R. 2766, the Arapaho and Roosevelt National Forests Land Exchange Act of 2003. As has already been mentioned, H.R. 2766 directs the Secretary of Agriculture to exchange to the city of Golden all rights, titles, and interests in 9.84 acres of Federal land within the Arapaho National Forest, upon receipt of acceptable title to 140 acres of non-Federal land. The 140 acres consist of two separate parcels, including up to about 80 acres near Evergreen, Colorado, known as Cub Creek, and about 60 acres near Argentine Pass, Colorado, known as the Argentine Pass. The 60-acre Argentine Pass property is made up of 15 patented mining claims. The bill modified the exterior boundary of the Arapaho National Forest to incorporate the Cub Creek parcel.

The Department supports the goals of H.R. 2766, but we do have a number of recommended changes, and we would like to work with the Committee and staff to incorporate some of those.

First, we recommend that if any cash equalization funds are received, that they be deposited pursuant to Public Law 90-171, commonly known as the Sisk Act, and, therefore, could be used for the acquisition of lands for addition to the National Forest System in the State of Colorado.

Secondly, we note that only the surface estate is being offered relative to the Argentine Pass parcel. The management of split estates is often very problematic for the Forest Service, and we try to avoid that situation if at all possible. We understand that it is not the sub-surface minerals that are at issue, but the underground water conveyance tunnel and the associated access that the city of Golden wishes to protect. We would like to work with the Committee and the city to develop language which ensures Golden the continued use and operation of the tunnel and have both the surface and sub-surface interests acquired in fee for the Federal estate.

H.R. 2766 indicates Congress' intent that the land exchange be consummated no later than 120 days after enactment and authorizes the city of Golden to construct the water pipeline on the 9.84 acres of Federal land prior to the consummation of the exchange. We have two concerns regarding that. First, we are a little concerned that we may not be able to complete the environmental consultation and clearances required for the disposal of the Federal property in 120 days. So we would like to see that moved to about 180 days. And second, we don't support construction prior to the conveyance of the property to the city of Golden, for a lot of reasons, including liability.

The Department believes that the proposed 148-acre acquisition which could result from the exchange would be very beneficial to the Forest Service and to the public estate. Specifically, the acquisition would eliminate a forest inholding; it could reduce the cost of forest boundary administration; it could increase recreation opportunities; and certainly it would ensure permanent public access to

a portion of the Continental Divide National Scenic Trail, as was previously mentioned.

In conclusion, the Department supports the concept of the exchange identified in H.R. 2766 and would like to work with the Committee to see the exchange proceed with mutual benefit.

[The prepared statement of Ms. Estill on H.R. 1723, H.R. 2707, and H.R. 2766 follows:]

**Statement of Elizabeth Estill, Deputy Chief, Programs, Legislation and Communications, Forest Service, U.S. Department of Agriculture, on H.R. 1723, H.R. 2707, and H.R. 2766**

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear before you today. I am Elizabeth Estill, Deputy Chief for Programs, Legislation, and Communications, Forest Service. I am here today to provide the Department's comments on three bills:

H.R. 1723—To designate certain National Forest System lands in the Commonwealth of Puerto Rico as components of the National Wilderness Preservation System, and for other purposes.

H.R. 2707—To direct the Secretaries of the Interior and Agriculture, acting through the Forest Service, to carry out a demonstration program to assess potential water savings through control of Salt Cedar and Russian Olive on forests and public lands administered by the Department of the Interior and the Forest Service.

H.R. 2766—To direct the Secretary of Agriculture to exchange certain lands within the Arapaho and Roosevelt National Forest in the State of Colorado.

The Department supports H.R. 1723. The Department supports the goals of H.R. 2766, but has a number of recommended changes. Further, the Department supports the goals of H.R. 2707, but has concerns about roles and requirements, and believes the work can be achieved within existing authorities. We would like to work with the Committee on the improvements we recommend to H.R. 2766 and H.R. 2707.

*H.R. 1723—Caribbean National Forest Act of 2003*

H.R. 1723 designates approximately 10,000 acres of land in the Caribbean National Forest/Luquillo Experimental Forest in the Commonwealth of Puerto Rico as the El Toro Wilderness and as a component of the National Wilderness Preservation System.

The bill provides that designation of the Wilderness shall not be construed to prevent within the area's boundaries: (1) installation and maintenance of hydrologic, meteorological, climatological, or atmospheric data collection and transmission facilities when they are essential to the scientific research purposes of the Luquillo Experimental Forest; (2) construction and maintenance of nesting structures, observation blinds, and population monitoring platforms for threatened and endangered species; or (3) construction and maintenance of trails to such facilities as necessary for research purposes and the recovery of threatened and endangered species.

The Caribbean National Forest encompasses over 28,000 acres of land, making it the largest block of public land in the Island of Puerto Rico. The Forest, locally known as El Yunque, is one of the most popular recreation sites in Puerto Rico and the National Forest System. Almost a million tourists, from Puerto Rico, the U.S. mainland, and abroad experience this tropical rain forest environment each year.

It is the only tropical rain forest in the National Forest System and by far the friendliest and most accessible in the world. It is also home to the Puerto Rican parrot, one of the 10 most endangered birds in the world, and nearly 240 species of trees and 120 terrestrial animals—four of which are also listed as endangered species.

The Department supports H.R. 1723. The 1997 revised Land and Resource Management Plan for the Caribbean National Forest/Luquillo Experimental Forest recommended wilderness designation for the 10,000-acre El Toro area. We believe the designation of the El Toro Wilderness would contribute to a more diverse wilderness preservation system and enhance the areas solitude, scenery and pristine qualities. Designation of the El Toro Wilderness would be significant. It would become the only tropical forest in the National Forest Wilderness System and the only wilderness area in Puerto Rico.

*H.R. 2707—Salt Cedar and Russian Olive Control Demonstration Act*

H.R. 2707, The Salt Cedar and Russian Olive Control Demonstration Act, directs the Secretary of the Interior and the Secretary of Agriculture, acting through the

Forest Service, to carry out a demonstration program to assess potential water savings through control of Salt cedar and Russian olive on forests and public lands under their jurisdiction.

The Department agrees with the goals of H.R. 2707, which would provide important information for managing two non-native invasive species that pose a significant ecological threat in the western United States. However, the Department has some concerns and would like to work with the Subcommittee to clarify and improve the bill.

The genus *Tamarix* (commonly known as Salt cedar) is comprised of shrubs or trees native to arid, saline regions of Eurasia and Africa. Since the 1830s, ten species have been introduced into North America as ornamental plants and for windbreaks. Two species of Salt cedar have escaped cultivation and rapidly invaded riparian areas of the western United States. Today, Salt cedar has infested over one million acres in the western United States, consuming large quantities of water, intercepting deep water tables and interfering with natural aquatic systems. It disrupts the structure and stability of native plant communities and degrades native wildlife habitat.

Russian olive (*Elaeagnus angustifolia*) is also a native of southern Europe and Western Asia that was first introduced in the late 1800s as an ornamental tree and windbreak. Although it is a non-native invasive species, Russian olive is a popular and hardy plant that is sold commercially for landscaping purposes. However, as its impact to native species has become evident, it has been declared a noxious species in states such as Utah, and sales have been banned in states such as Colorado. Like Salt cedar, Russian olive is a fast growing plant that can out-compete native vegetation and tax water reserves.

To manage invasive species, the Forest Service uses existing authorities to coordinate projects at the Federal, State, and local levels through its National Forest System, Research and Development, and State and Private Forestry Deputy Areas. The Forest Service participates with other Federal agencies in the National Invasive Species Council (NISC), established by Executive Order 13112. The Agency also participates in the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) to manage invasive plants. The NISC and FICMNEW continue to work collaboratively with local, State, Tribal, and regional interests to expand partnerships and coordination efforts among all stakeholders.

Section 3 of H.R. 2707 directs the Secretary of the Interior, in consultation with the Secretary of Agriculture through the Forest Service, to complete an assessment of current knowledge concerning Salt cedar and Russian olive invasion. It also calls for at least three projects to demonstrate and evaluate the most effective methods to control these invasive species. The bill specifies that no project may exceed \$7,000,000 and that the Federal share of the costs shall be no more than 65 percent of the total cost. The authorized funding is not in the President's budget and therefore must be considered within existing resources. The actions outlined in the bill can be achieved within existing authorities.

We would like to work with the Subcommittee and the Department of the Interior to:

- Clarify the roles of the Departments and Agency referenced in the bill,
- Specify components and requirements of the assessment report, and
- Develop criteria for selection of the demonstration project areas.

I commend the Subcommittee for addressing the ecological problems posed by these two non-native invasive species. The Subcommittee has recognized that the invasive species challenge to our Nation is enormous, and land managers and communities are stretching their limited resources significantly to address it. Increased understanding of the impact of these species on the quantity of surface and groundwater would advance our Nation's ability to address their ecological consequences.

*H.R. 2766—Arapaho and Roosevelt National Forests Land Exchange Act of 2003*

H.R. 2766 directs the Secretary of Agriculture to exchange to the City of Golden, Colorado all right, title and interest in 9.84 acres of Federal land within the Arapaho National Forest, upon receipt of acceptable title to 140 acres of non-Federal land. The 140 acres consist of two separate parcels, including 80 acres near Evergreen, Colorado known as Cub Creek and 60 acres near Argentine Pass, Colorado known as Argentine Pass. The 60-acre Argentine Pass property is made of 15 patented mining claims. The bill modifies the exterior boundary of the Arapaho National Forest to incorporate the Cub Creek parcel.

The bill requires the exchange values to be equalized. If the non-Federal parcel market value exceeds the approved market value of the Federal land, the values may be equalized by reducing the size of the Cub Creek non-Federal parcel or with

a cash equalization payment without regard to the cash equalization limitation of 43 U.S.C. 1716(b), as amended.

If the Federal land market value exceeds the market value of the Cub Creek non-Federal parcel, the values shall be equalized by the Secretary preparing a statement of value for the Argentine Pass non-Federal parcel and utilizing as much of such contributory value as is necessary as a credit to equalize value. Argentine Pass lands not needed to balance the exchange values will be donated to the Forest Service. In the event the Secretary declines to accept the Argentine Pass lands for any reason, Golden shall make a cash equalization payment to the Secretary as necessary to equalize the values of the Federal land and the Cub Creek parcel. We recommend that any cash equalization funds received be considered money received and deposited pursuant to Public Law 90-171 (16 U.S.C. 484 (a)), commonly known as the "Sisk Act," and may be used, without further appropriation, for the acquisition of lands for addition to the National Forest System in the State of Colorado.

Additionally, we note that only the surface estate is being offered relative to the Argentine Pass parcel. The management of split estates is problematic. We understand that it is not the minerals at issue but an underground water conveyance tunnel and associated access that the City of Golden wishes to protect. We prefer to acquire both surface and subsurface interests, in fee, and are willing to work with the Committee and the City to develop language which ensures continued use and operation of the tunnel.

H.R. 2766 indicates Congress' intent that the land exchange be consummated no later than 120 days after enactment and authorizes the City of Golden to construct a water pipeline on the 9.84 acres of Federal land immediately upon enactment and prior to the consummation of the exchange. We are concerned that we may not be able to complete environmental consultation and clearances required for the disposal of the Federal property in 120 days. We request extending this timeframe to 180 days. We also do not support construction occurring prior to conveyance of this property to the City of Golden. At the very least, we would expect that the City would be required to operate under a special use permit as long as the property remains in Federal ownership. Our preference is to delay construction of the pipeline until the conveyance is completed.

H.R. 2766 directs the City of Golden to pay for any necessary land surveys and appraisals. Further, the bill authorizes and directs the Secretary to sell the Federal land to Golden at its appraised value, if the land exchange cannot be consummated for any reason.

The Department does not object to H.R. 2766 with changes recommended above.

Public interest could also be served by the Arapaho National Forest acquisition of the 140 acres of non-Federal land. Specifically, the acquisition would eliminate a forest inholding, and could: reduce cost of forest boundary administration; increase recreation opportunities; and ensure permanent public access to a portion of the Continental Divide National Scenic Trail. The Department supports the concept of the exchange identified in H.R. 2766 and would like to work with the Committee to see this exchange proceed with mutual benefit.

#### *Conclusion*

This concludes my statement. We look forward to working with the Committee on making the suggested modifications as noted above, and I would be happy to answer your questions.

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Mr. McINNIS. Thank you very much.

Well, Mayor, I appreciate very much, Mayor Baroch, for you coming over. It is a wonderful community you are in. You may proceed.

#### **STATEMENT OF CHARLES J. BAROCH, MAYOR, CITY OF GOLDEN, STATE OF COLORADO**

Mr. BAROCH. Thank you very much for allowing me to come before the Committee. My name is Charles Baroch. I am mayor of the city of Golden. I am here to testify in favor of H.R. 2766 and to request that it be processed into law at the earliest possible date.

As some of you may be aware, the city of Golden is in the process of selling approximately 5500 acres of land in Clear Creek County, known as Beaver Brook property, to the U.S. Forest Service. The purpose of that sale is twofold; first, to bring the valuable land into

Forest Service ownership for general public use and enjoyment and to protect a wildlife habitat, and second, to raise funds to enable Golden to enhance its water supply and storage system.

As I am sure all of you are aware, Colorado and much of the West has been experiencing a very severe drought over the past few years. And even though we have received some relief this spring, the City feels it is our responsibility to augment our water supply for future emergencies and future generations. To achieve that goal, just last month the City Golden broke ground on the construction of a dam for our new water storage reservoir in an existing gravel quarry. When completed, the new reservoir will be able to store in excess of 1500 acre-feet of water and will increase our existing water storage capacity by approximately 400 percent. This is approximately a 90-day supply for the city of Golden in its peak season.

While a new reservoir is being constructed entirely on land owned by the City, an approximately 125-foot length of pipeline needed to run the water from the West Clear Creek to the reservoir needs to cross a small corner of national forest land along an existing ditch line. And we need to start building that pipeline this fall.

When we approached the Forest Service about this pipeline, and after some discussion with them and others, it was agreed by all concerned that a land exchange would be the best option to achieve the desired result. The reasoning was the land we need from the Forest Service is not especially useful to the public because of its odd configuration and topography, whereas the land that we can offer the Forest Service in exchange is highly desired by them for public purposes.

Accordingly, we have developed the land exchange proposal that is before you today as H.R. 2766. In that exchange the city of Golden would receive a 9.84-acre delta wing-shaped parcel of land from the Forest Service and in return would give the Forest Service up to 80 acres of land which they desire to acquire in the Cub Creek drainage in Park County, near Evergreen, Colorado. In addition, we are willing to donate the surface estate of 61 acres to the Forest Service along the Continental Divide in Clear Creek and Summit counties. The 61 acres is traversed by the Continental Divide National Scenic Trail and also includes an access route to the trail.

If for some reason the land exchange cannot be consummated, H.R. 2766 directs the Forest Service to sell us the 9.84-acre parcel at full fair market value, and use the proceeds of the sale to buy other lands of the Agency's choosing in the State of Colorado.

Finally, the bill authorizes us to construct the pipeline along the 125 feet of national forest land immediately upon the bill's enactment. We need that authority in order to complete the pipeline this fall and begin filling the reservoir this spring.

Mr. Chairman, we have come to Congress to both expedite this exchange and because of minor forest boundary changes needed to enable the Forest Service to acquire land which we will convey to them near Evergreen. In addition, should the exchange fall through due to title problems with any lands involved, it is imperative that Congress direct the land be sold to us at the earliest date possible. I note the land exchange as directed by H.R. 2766 has been endorsed by Clear Creek County, Summit County, and Park County

boards of county commissioners and also by the nonprofit Continental Divide Trail Alliance, which is interested in seeing the land along the trail acquired by the Forest Service.

I wish to thank Congressmen Bob Beauprez and Mark Udall for introducing this legislation, and you, Mr. Chairman, for scheduling a hearing so quickly. This land exchange is very important to the city of Golden. We are deeply appreciative of your efforts to help us augment our municipal water supply.

I will be happy to answer any questions you or other members of the Subcommittee might have. Thank you.

[The prepared statement of Mr. Baroch follows:]

**Statement of The Honorable Charles J. Baroch, Mayor,  
City of Golden, Colorado, on H.R. 2766**

Chairman McInnis & Members of the Subcommittee,

My name is Charles J. Baroch and I am the Mayor of the City of Golden, Colorado. I appear before you today to testify in favor of H.R. 2766, and to request that it be processed into law at the earliest possible date.

As some of you may be aware, the City of Golden is in the process of selling approximately 5,500 acres of land, known as the Beaver Brook property, to the U.S. Forest Service. The purpose of that sale is twofold. First to bring valuable lands into Forest Service ownership for general public use and enjoyment, and second to raise funds to enable our City to enhance its water supply and storage system. As I'm sure all of you are aware, Colorado has been experiencing a very severe drought over the past few years, and even though we have received some relief this year, the City feels it is our responsibility to augment our water supplies for future emergencies.

To achieve that goal, just last month, the City of Golden broke ground on construction of a new water storage reservoir in an existing gravel quarry near the West Fork of Clear Creek, approximately 25 miles west of Golden. When completed, the new reservoir will be able to store in excess of 1,800 acre feet of water and will increase our existing water storage by approximately 400%.

While the new reservoir is being constructed entirely on land owned by the City, an approximate 125 foot length of the pipeline needed to run water from West Clear Creek to the reservoir needs to cross a small corner of National Forest land along an existing ditch line, and we need to start building the pipeline this fall.

When we approached the Forest Service about this pipeline, and after some discussion with them and others, it was agreed by all concerned that a land exchange would be the best option to achieve the desired result. The reasoning was that the land we need from the Forest Service is not especially useful to the public because of its odd configuration, whereas the land that we can offer the Forest Service in an exchange is highly desired by them for public purposes.

Accordingly, we have developed the land exchange proposal that is before you today in H.R. 2766. In that exchange, the City of Golden would receive a 9.84 acre delta-wing shaped parcel of land from the Forest Service, and in return, we would give the Forest Service up to 80 acres of land which they desire to acquire in the Cub Creek drainage near Evergreen, Colorado. In addition, we would donate the surface estate of 61 acres to the Forest Service along the Continental Divide in Clear Creek and Summit Counties. The 61 acres is traversed by the Continental Divide National Scenic Trail, and also includes an access route to the Trail.

If for some reason the land exchange cannot be consummated, H.R. 2766 directs the Forest Service to sell us the 9.84 acre parcel at full fair market value and to use the proceeds of the sale to buy other lands of the agency's choosing in the State of Colorado.

Finally, the bill authorizes us to construct the pipeline across the 125 feet of National Forest land immediately upon the bill's enactment. We need that authority in order to complete the pipeline this fall and begin filling the reservoir this spring.

Mr. Chairman, we have come to Congress to both expedite this exchange and because a minor forest boundary change is needed to enable the Forest Service to acquire the lands we will convey to them near Evergreen. In addition, should the exchange fall through due to title problems with any of the lands involved, it is imperative that Congress direct that the land be sold to us at the earliest date possible.

I note that the land exchange directed by H.R. 2766 has been endorsed by the Clear Creek County, Summit County and Park County Boards of County Commis-

sioners, and also by the non-profit Continental Divide Trail Alliance, which is interested in seeing the land along the Trail acquired by the Forest Service.

I also wish to thank Congressmen Bob Beauprez and Mark Udall for introducing this legislation, and you, Mr. Chairman, for scheduling a hearing so quickly. This land exchange is very important to the City of Golden, and we are deeply appreciative of your efforts to help us augment our municipal water supply.

That concludes my testimony. I would be happy to answer any questions you or other members of the Subcommittee might have.

Mr. MCINNIS. Thank you, Mayor. And again, thank you for traveling the distance to testify in front of the Committee.

I will open it up for questions. Mr. Rehberg? Mr. Udall?

Mr. MARK UDALL. Thank you, Mr. Chairman. And I wanted to thank you for holding this hearing. The bills on today's agenda are quite different, but each is a good measure. I am biased as a co-sponsor of most of them, but I am really appreciative that the Subcommittee is beginning the process of moving them forward.

In particular, I want to thank the Chairman for the expedited treatment that is being given to H.R. 2766, which my colleague Mr. Beauprez and I introduced just last week. The bill is very important for our State, very important for the city of Golden, so it is excellent to have it on today's agenda. And I am hoping that when we get back from our August break we can take up some more bills dealing with the management of national forests in Colorado, such as the bills I mentioned to you, Mr. Chairman, in my recent letter.

And I want to thank you again for holding the hearing at this time. I don't have any questions.

Mr. MCINNIS. Mr. Pearce? Any questions? Go ahead. Mr. Renzi?

Mr. RENZI. Thank you, Mr. Chairman.

Mr. MCINNIS. Go ahead.

Mr. RENZI. Mr. Chairman, I am grateful. Thank you. I enjoy being around all these Coloradans today and am willing to do whatever it takes to stay in the good graces of my Chairman.

I am just interested in learning something from you, though, as a freshman here. Did they look at the option of an easement at all, and how would that play out, rather than—it seems like you are giving up so much.

Mr. BAROCH. Yes, we did look at the option of an easement, and through the cooperation of the Forest Service, they recommended the land transfer, or land exchange. With an easement, you never know what eventually might happen in future generations. And by taking firm title to the land, then we have the option of going in and working on the tunnel, the drainage ditch, the water pipeline as we wish to maintain it, whatever, expand it if we have to, without having to go through additional dealings with the National Forest Service. So that was discussed. We talked about that option, and it was the agreement of both parties that a land swap was probably the best approach to take.

Mr. MCINNIS. Mr. Beauprez?

Mr. BEAUPREZ. Thank you, Mr. Chairman. Just a couple of quick questions, if I might. First to Ms. Estill.

You mentioned a couple of things I would like to probe. The subsurface rights—I understand if you can, you would like to have them all—my understanding that the City's pipeline already goes



through the Argentine Pass property. And for the reasons that I think brought us to the point of wanting a sale as opposed to an easement, it seems to make sense to me for the City to maintain those subsurface rights. I would like you to explain exactly why the Forest Service is going to—you are not—the Forest Service doesn't anticipate any mining or drilling, certainly, up there for oil or gas?

Ms. ESTILL. Well, we don't actually know which of the parcels—we haven't been out on the ground with Golden and looked at those parcels to see what is there. But generally, no, we aren't expecting any difficulties with mining of minerals. It really would be with—we think that Golden's interest in keeping the subsurface, as you stated, is to be able to maintain that tunnel. We believe that we could put in the legislation the ability to maintain that tunnel in the legislation, and then have the subsurface rights. It just makes it cleaner for us if we have the subsurface with the surface, and that is generally what we like to do.

Mr. BEAUPREZ. You are open to working that out?

Ms. ESTILL. We are certainly open to working that out.

Mr. BEAUPREZ. And I understand, I guess, some of your concern about the timing of all this. But given the Sisk Act and the provisions of this bill that if for some reason this land swap falls apart, the land will be sold to the city of Golden, you have committed to that, the cash exchange. Why the delay, then, in allowing them to move forward? Because I am going to ask the Mayor in just a second what happens if they don't get to go there pretty quick.

Ms. ESTILL. Well, absent specific language that exempts the Forest Service from obtaining clearances and conducting analysis required by the Endangered Species Act, the National Historic Preservation Act, and other environmental laws, we would proceed with applying for just going through all of those processes in advance of disposing the land. The only probable or likely sticking point might be, as we exchange out of this almost-10 acres, it is considered lynx habitat, and we will have to go through consultation with Fish and Wildlife Service. And conceivably, that could slow things down without specific provisions in this legislation.

Mr. BEAUPREZ. Mr. Mayor, what happens if—I know you explained to me once that time is really critical. What happens if you can't get going with construction?

Mr. BAROCH. Well, if we don't get construction, obviously, we won't begin filling the reservoir until we have the pipeline in place. We have excess water during the wintertime out of Clear Creek that we don't use right now. We could start storing that water in the wintertime and then in the spring, when the runoff is so heavy, generally there is excess capacity in Clear Creek. Therefore, we would like to begin storing that water immediately.

Mr. BEAUPREZ. Why don't you take just a second and explain your water situation last summer.

Mr. BAROCH. That is a very complicated issue.

Mr. BEAUPREZ. How short did you get?

Mr. BAROCH. We had a half of our water supply cut out from under us under a decree by the Water Court that dropped priority 5 water down below priority 9, and as a consequence, we went into severe restrictions during September and October until November, when we got some additional—

Mr. BEAUPREZ. How severe?

Mr. BAROCH. We were down—typically in the summertime, we run around 7.5 million gallons a day through our system for watering our lawns and our people. We were down to 2.5 million gallons a day. So we terminated all outdoor watering. The only watering you could do was if you saved your water from taking a shower. Before it warmed up, you could take it out and water your vegetables or your flower garden. So we were—

Mr. BEAUPREZ. This storage is pretty critical?

Mr. BAROCH. This storage is very critical to us.

Mr. BEAUPREZ. Thank you. Thank you, Mr. Chairman.

Mr. MCINNIS. Thank you. That concludes our testimony. Again, I appreciate that.

And, Ms. Estill, I do want to pass on to the U.S. Forest Service—I am not clear whether those forest firefighters that we lost yesterday were with the Forest Service or the BLM, but at any rate, if they were yours, we send on our deepest condolences. This Committee has been very active in that fire situation, but those are brave young men and women we have out there on the front line. So we pass on our condolences.

Ms. ESTILL. Thank you very much.

Mr. MARK UDALL. Mr. Chairman, if I could just—if I might, Mr. Beauprez mentioned this bill is supported by a number of local governments and groups, and I would ask that their letters of support be included in the record of today's hearing.

Mr. MCINNIS. Without objection, so ordered. The panel is excused. Thank you very much.

[NOTE; Letters of support for H.R. 2766 have been retained in the Committee's official files.]

Mr. REHBERG. [Presiding] We now begin the hearing on H.R. 1723, the Caribbean National Forest Wilderness Act of 2003.

Mr. REHBERG. The sponsor of the bill, Resident Commissioner Acevedo-Vilá of Puerto Rico, could not be with us today. Without objection, his statement will be submitted for the record.

[The prepared statement of Mr. Acevedo-Vilá follows:]

**Statement of Resident Commissioner Aníbal Acevedo-Vilá, a Delegate in Congress from Puerto Rico, on H.R. 1723**

Mr. Chairman, I greatly appreciate you affording the Caribbean National Forest Wilderness Act of 2003, H.R. 1723, this hearing.

I would also like to thank the Ranking Member of the Committee, Representative Nick Rahall, who is an original cosponsor of this bill, for his strong support, in addition to the other members of the Resources Committee who are cosponsors of this bill.

I am also thankful for the U.S. Forest Service's presence here today. I have developed a good working relationship with the Forest Service, both locally in Puerto Rico and in the national office, and I appreciate Deputy Chief Elizabeth Estill sharing with us the administration's position on the bill today.

As some of you may know the Caribbean National Forest, the only tropical rainforest in the national forest system, celebrated its 100th anniversary earlier this year. Twenty-seven years before this, in 1876, Spain's King Alfonso XII proclaimed this forest a Crown Reserve, making this forest, known locally as El Yunque, one of the first forest reserves in the western hemisphere.

Due to the topography of El Yunque, unsuitable forest composition for timber, and conservation by the Forest Service, El Yunque, and to a greater degree the lands to be designated as the El Toro Wilderness in this bill, maintain the characteristics that they had 100 years ago. El Yunque contains virtually all of the primary forest in Puerto Rico, and as such represents a unique cultural and natural heritage for

Puerto Ricans. The Wilderness Act was passed to protect just these types of lands—where the forest has been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. Therefore, I believe that wilderness protection is appropriate and in line with the history of these lands and the value they contribute to Puerto Rico.

However, these beliefs are not solely mine. When the Forest Service revised the management plan for El Yunque, the public widely supported wilderness designations on the forest. As the population density in Puerto Rico is among the highest in the nation, large, undeveloped tracts of land are increasingly rare, while their value to the public has grown significantly. Public support for wilderness led the forest plan to nearly double the wilderness recommendation from 5,254 acres to what is included in this bill, over 10,000 acres. What my bill proposes to designate as wilderness is identical to that recommendation in the Caribbean National Forest's revised land and resource management plan, and would create the first wilderness area in El Yunque. It should also be noted that there are no competing interests, such as timber harvest, road construction, or water development, in the lands to be designated as wilderness.

The El Toro area to be designated as wilderness through this bill is also essential habitat for the Puerto Rican parrot. One of the ten-most endangered birds in the world and a Federally listed endangered species, the parrot requires large, undeveloped tracts of land for its survival. It is for this reason that the only remaining wild population of this bird, currently about 25 birds, is confined to El Yunque. Taking into consideration the management needs of the Puerto Rican parrot, this legislation permits nesting construction and watching and monitoring activity to occur in the proposed wilderness area. In addition to the Puerto Rican parrot, no fewer than eight other threatened and endangered species call El Yunque home. Many other species are endemic only to El Yunque, and the forest also provides respite to dozens of migratory bird species. Protecting the El Toro area as wilderness will ensure that the habitat of these species remains undeveloped and well suited for their survival.

Water conservation is another important value of El Yunque. The forest is comprised of 8 major watersheds that provide water for nearly 800,000 Puerto Ricans. Weather events in El Yunque, such as rainstorms experienced earlier this year, lead to mudslides often around roads, that impact water quality for both species and human consumers. Through wilderness protection, much of this forest will be protected from road development that can accelerate this type of erosion and water impairment.

The El Toro area currently has a network of trails that permit an array of recreational opportunities that will continue under wilderness designation. Almost one million tourists a year currently visit and use El Yunque. Local residents and tourists alike hike, swim, climb El Toro peak—the highest peak in El Yunque, bird watch and otherwise take advantage of the wild nature of the proposed wilderness area.

I believe that the characteristics and values of the proposed El Toro Wilderness Area are very much in concert with the intent and purpose of the Wilderness Act. Solitude, the absence of the imprint of man, and nationally unique ecological and biological features comprise El Yunque and the proposed wilderness area. It would be fitting that the first wilderness designation in El Yunque be El Toro, as it encompasses the qualities of the forest, and should be protected in that nature for perpetuity.

Again, I very much appreciate the Chairman's scheduling of this hearing for this bill and other worthy legislation. I appreciate the support for this bill that my colleagues have provided, and I encourage the support of this Subcommittee, and the Resources Committee in considering and approving this bill.

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Mr. REHBERG. We will now hear from Panel II on H.R. 1723. Elizabeth Estill is Deputy Chief of Programs, Legislation, and Communications at the United States Forest Service. Please go ahead.

**STATEMENT OF ELIZABETH ESTILL, DEPUTY CHIEF, PROGRAMS, LEGISLATION, AND COMMUNICATIONS, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE**

Ms. ESTILL. Thank you for the opportunity to provide USDA's views on H.R. 1723. The Department supports H.R. 1723, which

designates approximately 10,000 acres of land in the Caribbean National Forest Luquillo Experimental Forest in the Commonwealth of Puerto Rico as the El Toro Wilderness and as a component of the National Wilderness Preservation System.

The Caribbean National Forest encompasses over 28,000 acres of land, making it the largest block of public land in Puerto Rico. It is the only tropical rain forest in the National Forest system and, by far, the friendliest and most accessible in the world. Almost a million people visit the Caribbean National Forest each year from Puerto Rico, from the mainland, and from abroad. It is the home to the Puerto Rican parrot, one of the ten most endangered birds in the world, and nearly 240 species of trees and 120 terrestrial animals, four of which are also listed as endangered species.

The 1997 Revised Land and Resource Management Plan for the Caribbean National Forest recommended wilderness designation for the 10,000-acre El Toro area. We believe that the designation of the El Toro Wilderness will contribute to a more diverse national wilderness preservation system.

In conclusion, the Department of Agriculture enthusiastically supports H.R. 1723.

This concludes my testimony. I am willing to answer any questions.

Mr. REHBERG. Are there any questions from the Committee? Mr. Udall?

Mr. MARK UDALL. Mr. Chairman, I apologize. I am moving slowly since I have already seen you this morning, but—we had those late votes. I don't have any questions at this time. Thank you.

Mr. REHBERG. OK. Thank you, Ms. Estill. I might remind the Committee that if they have any additional questions, the hearing record will be left open for 10 days and you will have an opportunity to submit those questions. And Ms. Estill, if you could respond in writing, we would appreciate that.

Ms. ESTILL. I would be glad to.

Mr. REHBERG. I'd like to introduce the witnesses for H.R. 1005. On Panel III we have Mr. Chris Kearney, Deputy Assistant Secretary, Policy and International Affairs, Department of the Interior; and the Honorable Don Davis, Commissioner, Rio Blanco, Colorado.

Let me remind the witnesses that under the Committee rules you must limit your oral statements to 5 minutes, but your entire statement will appear in the record.

I now recognize Mr. Kearney for his statement.

[The prepared statement of Mr. McInnis on H.R. 1005 follows:]

**Statement of The Honorable Scott McInnis, Chairman, Subcommittee on Forests and Forest Health, on H.R. 1005**

At the outset, I want to welcome my good friend, Commissioner Don Davis, here today. This is the second time in as many years that Don has come out to preach the gospel of full-funding for PILT. Don, here's to hoping that the next time you come to Washington, DC the President will have signed this bill into law and you can talk about something other than PILT. Welcome Don.

Colleagues, when Congress enacted Payment In Lieu of Taxes (PILT) and the Refuge Revenue Sharing Act, it made both an admission and a promise. The admission that Congress made was that it would be fundamentally unfair for the Federal Government to own vast tracks of land within a county or municipality—land that would otherwise provide local revenue in the form of property tax to fund roads,

schools and other important social services—and not reimburse the county for those revenue losses. Remember, the Federal Government's holdings are generally immune from state and local taxation. And so Congress affirmatively recognized that many localities would quite literally wither on the vine without some form of compensation from the Federal Government.

With that admission in mind, Congress made a promise—to provide just and reasonable compensation to the local governments whose tax base is eroded by a large Federal land ownership presence. That promise was embodied and codified in PILT and the Refuge Revenue Sharing Act, which set out a reimbursement formula under which localities would be compensated.

Unfortunately, Congress has rarely been willing to fund PILT and the Refuge Revenue Fund at the levels authorized under these formulas. You couldn't say that Congress totally broke its promise, but there's no question we've been fudging—big time. In Fiscal Year 2003, for example, Congress shortchanged PILT in excess of \$100 million, and the Refuge Revenue Sharing several million more. In the scheme of the United States Treasury, this may not seem like a big deal. Representatives of counties and other local governments—including my good friend Don Davis who's here to testify today—will tell you otherwise. In times when state and county governments are cash-starved—and schools and hospitals and social services suffer because of it—this mammoth shortfall strikes even deeper at rural communities.

Now there are some who say we can't afford permanent full funding of PILT. I say we can't afford not to. PILT and the Refuge Revenue Sharing Act fund the nuts-and-bolts programs that keep communities strong. These dollars go directly to classrooms, to paving the expansion of the local county road, to keeping cops on the street, and to funding critical social service programs. This is mom-and-apple pie stuff, Colleagues, that's being shortchanged because of Congress and this and previous Administration's historic propensity to fudge on its word.

H.R. 1005, the PILT and Refuge Revenue Sharing Permanent Funding Act, would rectify this inequity by doing just what the title suggests—fully funding both programs without further appropriation. The bill solidifies Congress' promise to our friends in local government in ironclad terms by guaranteeing that appropriated moneys will always equal the levels authorized by those complicated formulas.

No more partial funding, no more fudging on our word. H.R. 1005 settles the score once and for all for communities and local governments.

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**STATEMENT OF CHRIS KEARNEY, DEPUTY ASSISTANT SECRETARY, POLICY/INTERNATIONAL AFFAIRS, U.S. DEPARTMENT OF THE INTERIOR**

Mr. KEARNEY. Thank you, Mr. Chairman, and good morning, members of the Committee. I am pleased to have the opportunity to testify today on H.R. 1005, a bill that would make the Bureau of Land Management's Payment In Lieu of Taxes Program and the Fish and Wildlife Service's Refuge Revenue Sharing Program mandatory.

A hearing on PILT took place almost a year ago today, on July 25, 2002, before this Subcommittee, and our position on this bill remains unchanged. The administration strongly supports the PILT and RRS programs and views them as high priorities. But the administration is strongly opposed to 1005 because it would force the Federal Government to either raise taxes or cut into other programs that are integral to the President's budget and important for the American public.

Now, the President's Fiscal Year 2004 budget request, however, demonstrates our clear commitment to the PILT program. The administration requested \$165 million in Fiscal Year 2003 for PILT, and \$200 million in 2004—which is an increase of \$35 million. Furthermore, while the total amount requested for all programs by the Department for Fiscal Year 2004 represents an approximately 3.3 percent increase from the prior year, the request for PILT is more than 21 percent over last year's request for this important pro-

gram, reflecting our continued commitment and obligation to the PILT program even in the context of other significant budget priorities.

While we recognize the importance of the program, it should not be viewed in isolation from other Departmental and Federal programs that do bring or will bring benefits to the counties in the future. Examples include funding for rural fire assistance and our efforts to work with gateway communities to increase tourism.

This year some counties received slightly reduced PILT payments to adjust for increased revenue received during the previous fiscal year under the Secure Rural Schools and Community Self-Determination Act. This act provides payments to compensate certain counties for declining timber receipts. The combination of PILT payments and payments under Secure Rural Schools Act, however, will result in higher overall payments for the affected counties.

I would also like to note that we continue to engage in discussions with the National Association of Counties concerning issues associated with the allocation formula, and we believe those issues should be addressed before considering such a significant action as converting them to permanent payments.

In conclusion, the administration recognizes that these payments are important to local Governments, sometimes comprising a significant portion of their operating budgets. The PILT and RRS monies have been used for critical functions, such as local search and rescue operations, road maintenance, law enforcement, schools, and emergency services. These expenditures often support the activities of people from around the country who visit or recreate on Federal lands. The Department looks forward to continuing to work cooperatively with the communities on these important issues.

This concludes my prepared statement. I would be happy to answer any questions that you may have.

[The prepared statement of Mr. Kearney follows:]

**Statement of Chris Kearney, Deputy Assistant Secretary for Policy and International Affairs, U.S. Department of the Interior, on H.R. 1005**

Mr. Chairman and members of the Committee, I am pleased to have the opportunity to testify today on H.R. 1005, a bill that would make the Bureau of Land Management's (BLM) Payments-in-Lieu of Taxes (PILT) Program and the Fish and Wildlife Service's Refuge Revenue Sharing (RRS) Program mandatory. A hearing on PILT took place almost a year ago today on July 25, 2002, before this Subcommittee. Our position on this bill remains unchanged. The Administration strongly supports the PILT and RRS programs and views them as high priorities, but the Administration is strongly opposed to H.R. 1005 because it would force the Federal Government to either raise taxes or cut into other programs that are integral to the President's budget and important for the American people.

*Background*

The PILT Act (P.L. 94-565) was passed by Congress in 1976 to provide payments to local governments in counties where certain Federal lands are located within their boundaries. PILT is based on the concept that these local governments incur costs associated with maintaining infrastructure on Federal lands within their boundaries but are unable to collect taxes on these lands; thus, they need to be compensated for these losses in tax revenues. The payments are made to local governments in lieu of tax revenues and to supplement other Federal land receipts shared with local governments. The amounts available for payments to local governments require annual appropriation by Congress. In the past, the BLM has allocated payments according to the formula in the PILT Act. In recognition of fact that this program is multi-bureau in nature, beginning in FY 2004, funding and management of PILT will be administered at the Departmental level. The formula takes into ac-

count the population within an affected unit of local government, the number of acres of eligible Federal land, and the amount of certain Federal land payments received by the county in the preceding year. These payments are other Federal revenues (such as receipts from mineral leasing, livestock grazing, and timber harvesting) that the Federal Government transfers to the counties.

The President's FY 2004 budget request demonstrates our commitment to PILT. The Administration requested \$165 million in FY 2003 for PILT, and \$200 million in FY 2004, an increase of \$35 million. Furthermore, while the total amount requested for all programs by the Department for FY 2004 represents a 3.3% increase from the prior year, the request for PILT is more than 21% over last year's request for this important program, reflecting our continued commitment and obligation to the PILT program even in the context of other significant budget priorities. While we recognize the importance of the PILT program, it should not be viewed in isolation from other departmental and Federal programs that bring or will bring benefits to counties in the future. Examples include funding provided for rural fire assistance and our efforts to work with Gateway Communities to increase tourism opportunities.

This year, some counties received slightly reduced PILT payments to adjust for increased revenue received during the previous fiscal year under the Secure Rural Schools and Community Self-Determination Act. This Act provides payments to compensate certain counties for declining timber receipts. The combination of PILT payments and payments under the Secure Rural Schools Act, however, will result in higher overall payments to affected counties.

The Refuge Revenue Sharing Act (RRS) (16 U.S.C. 715s) as amended, was enacted in 1935. It authorizes payments to be made to offset tax losses to counties in which U.S. Fish and Wildlife Service (FWS) fee and withdrawn public domain lands are located. The original Act provided for 25 percent of the net receipts from revenues from the sale or other disposition of products on refuge lands to be paid to counties. The Act was amended in 1964 to make it more like the payment-in-lieu of tax program. The new provisions distinguished between acquired lands that are purchased by the Service and lands that are withdrawn from the public domain for administration by the Service. For fee lands, the counties received 3/4 of 1 percent of the adjusted value of the land or 25 percent of the net receipts, whichever was greater, with the value of the land to be reappraised every 5 years. They continued to receive 25 percent of the net receipts collected on the withdrawn public domain lands in their county.

The Act was amended again in 1978 in order to provide payments that better reflected market land values to counties with lands administered by the Service within their boundaries. The method used to determine the adjusted cost of the land acquired during the depression years of the 1930's (using agricultural land indices) resulted in continuing low land values compared to the land prices that existed in 1978. Also, other lands that were purchased during periods of inflated land values were found to be overvalued. The Congress decided that the payments did not adequately reflect current tax values of the property. It also recognized that national wildlife refuges are established first and foremost for the protection and enhancement of wildlife and that many produce little or no income that could be shared with the local county.

In the 1978 amendments, Congress chose to distinguish between lands acquired in fee and lands withdrawn from the public domain, by recognizing that the financial impact on counties tends to be greater when lands are directly withdrawn from the tax rolls, rather than when the refuge unit is created out of the public domain and has never been subject to a property tax. The formula adopted then, and still in effect, allows the Service to pay counties containing lands acquired in fee the greater of: 75 cents per acre, 3/4 of 1 percent of the fair market value of that land, or 25 percent of the net receipts collected from the area. If receipts are insufficient to satisfy these payments, appropriations are authorized to make up the difference.

Counties can use funds for any government purpose, and pass through the funds to lesser units of local government within the county that experience a reduction of real property taxes as a result of the existence of Service fee lands within their boundaries. Counties with Service lands that are withdrawn from the public domain continue to receive 25 percent of the receipts collected from the area and are paid under the provisions of the PILT Act.

I would like to note that many of the same concerns we have previously expressed regarding PILT funding hold true for RRS funding as well. We continue to engage in discussions with the National Association of Counties concerning issues associated with the allocation formula and we believe those issues should be addressed before considering such a significant action as converting these payments to permanent mandatory payments.

Although the Administration supports the purpose of H.R. 1005, we must oppose it for the same reasons that we opposed an identical bill last year in the 107th Congress. We support protections for local governments against the loss of property tax revenue when private lands are acquired by a Federal agency. However, the Administration is opposed to creating a new mandatory spending category to fund these programs because it would force the Federal Government either to raise taxes or cut into other programs that are integral to the President's budget and important to the American public.

*Conclusion*

The Administration recognizes that these payments are important to local governments, sometimes comprising a significant portion of their operating budgets. The PILT and RRS monies have been used for critical functions such as local search and rescue operations, road maintenance, law enforcement, schools and emergency services. These expenditures often support the activities of people from around the country who visit or recreate on Federal lands. The Department looks forward to continuing to work cooperatively with the communities on these important issues.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions that you or the other members may have.

Mr. REHBERG. Thank you, Mr. Kearney.  
Mr. Davis?

**STATEMENT OF HON. DON DAVIS, COMMISSIONER,  
RIO BLANCO, COLORADO**

Mr. DAVIS. Thank you, Mr. Chairman.

Mr. Chairman and distinguished Subcommittee members, it is an honor to appear before you to present this testimony in support of H.R. 1005. My name is Don Davis, and I am a county commissioner from Rio Blanco County, Colorado. I serve as Chairman of the Public Lands Steering Committee of Colorado Counties Incorporated, and as president of the Western Interstate Region of the National Association of Counties.

H.R. 1005, the PILT and Refuge Revenue Sharing Permanent Funding Act represents a bipartisan effort to provide an ongoing, secure source of funding. This legislation, introduced in the House by Chairman McNinnis, would permanently fund these two programs so critical to public land counties. It is landmark legislation and should be enacted without delay.

Counties are the general-purpose local government that must provide public services both for the Federal employees and their families and for the users of Federal lands. These local services include law enforcement, search and rescue, firefighting, health care, solid waste disposal, road and bridge maintenance, et cetera.

In 1976, Congress enacted, and President Ford signed, the Payment In Lieu of Taxes Act. Under the 1976 PILT formula, total payments nationwide averaged about \$100 million annually, depending on the level established each year in the appropriations process. There was no allowance for inflation.

In 1994 Congress amended the PILT formula at the request of the National Association of Counties to recognize inflationary costs. Unfortunately, in the intervening 8 years, no Presidential budget has requested, nor has any Congress yet appropriated, the amount authorized under the revised formula.

NACo and CCI wish to go on record to applaud the members of the House of Representatives for requesting a historic \$225 million for PILT in Fiscal Year 2004. That was passed just a few days ago. We thank you for your strong support. However, though we are



grateful for any increased appropriation, we view incremental increases as stop-gap measures. PILT should not be seen as just another spending program in the BLM, and it should not have to compete with worthwhile conservation programs within the Interior and related agencies.

In Colorado, 56 out of the 63 counties contain Federal lands. There are a total of 23.6 million entitlement acres of Federal lands in Colorado. With annual PILT payment in 2002 of approximately \$17.6 million, this works out to about 74 cents per acre. However, in Rio Blanco County, we have 1.5 million acres of Federal land and a PILT payment of \$272,412, or about 18 cents per acre. In Hinsdale County in the southwestern part of the State, the situation is even worse. With 676,515 acres of Federal land, their PILT payment was only \$70,770—about 10 cents an acre.

The 676,515 acres of public lands in Hinsdale County represent 95 percent of the county. There are only about 37,000 acres of private land. Three hundred and five miles of 326 miles of county roads are located on Federal lands. In the summer months, the population of Hinsdale County swells as much as 20-fold. The influx of recreation-seeking visitors creates extreme law enforcement challenges, which carry commensurate costs. Local property taxes for the 37,000 acres of private land averages \$9.91 per acre, compared to 10 cents.

The National Association of Counties also supports permanent funding for the Refuge Revenue Sharing Program through H.R. 1005. Federal Wildlife Refuge acreage is not automatically PILT-entitled. In fact, if it is acquired by Fish and Wildlife Services from private owners, it is not covered by PILT. This program is particularly important in the eastern States.

I thank you for the opportunity to testify.

[The prepared statement of Mr. Davis follows:]

**Statement of The Honorable Don Davis, Commissioner, Rio Blanco County, Colorado, on behalf of The National Association of Counties & Colorado Counties, Inc.**

Mr. Chairman, and distinguished Subcommittee members, it is an honor to appear before you to present this testimony in support of H.R. 1005. My name is Don Davis, and I am a County Commissioner from Rio Blanco County, Colorado. I serve as Chairman of the Public Lands Steering Committee of Colorado Counties, Inc., and as President of the Western Interstate Region of the National Association of Counties (NACo).

H.R. 1005, the PILT and Refuge Revenue Sharing Permanent Funding Act, represents a bi-partisan effort to provide an ongoing secure source of funding for the counties entitled to payments under the Payment in Lieu of Taxes Act of 1976. This legislation, introduced by my Congressman, Chairman McInnis, would permanently fund this program so critical to communities surrounded by Federally managed land.

The Payments in Lieu of Taxes program has a two-fold purpose: (1) to help compensate counties "in lieu" of property taxes for the tax exempt nature of Federally-owned lands; and (2) to help reimburse counties for a portion of the costs of local services impacted by the activities on and visitors to the public lands.

Counties are the general purpose local government that must provide public services for both Federal employees and their families and for the users of Federal lands. These local services include law enforcement, search and rescue, fire fighting, health care, solid waste disposal, local recreation programs, road and bridge maintenance, etc. There are more than 1900 counties nationwide that are eligible to receive PILT.

In 1976, Congress enacted, and President Ford signed, the Payments in Lieu of Taxes Act. It was sponsored by Rep. Frank Evans of Colorado. This legislation was

based upon a key finding of the Congressional Public Land Law Review Commission co-chaired by Rep. Wayne Aspinall of Colorado and Rep. Mo Udall of Arizona. Under the 1976 PILT formula, total payments nationwide averaged about \$100 million annually, depending upon the level established each year in the appropriation process. There was no allowance for inflation.

In 1994 Congress amended the PILT formula, at the request of the National Association of Counties, to recognize inflationary costs. Unfortunately, in the intervening eight years, no President has asked for, nor has any Congress appropriated, the full amount authorized under the revised formula. This lack of secure funding has been particularly distressing for rural public land counties like Rio Blanco County and Hinsdale County in Colorado. In the PILT formula there is a pro rata payment provision to disperse payment when less than full payment is provided. This provision adversely affects counties with large holdings of public lands that also have low populations. For example, one year the payment for Rio Blanco County actually dropped by \$12,000 (about 8%) even though overall payment nationwide increased. NACO supports an amendment to the statutory formula which would, in conjunction with permanent full funding, allow the low-population high-entitlement-acreage counties to realize more of the benefit from PILT. However, even absent such an adjustment to the formula, this is an inequity that can largely be corrected by the enactment of H.R. 1005.

In Colorado, 56 out of 63 counties contain Federal lands. There are a total of 23.6 million "entitlement" acres of Federal lands in Colorado, with annual PILT payment in 2003 of approximately \$17.6 million. This works out to about seventy-four cents per acre.

However, in Rio Blanco County with 1.5 million acres of Federal land, the PILT payment was \$272,412, or about eighteen cents per acre. In Hinsdale County the situation is even worse. With 676,515 acres of Federal land their PILT payment was only \$70,770, about ten cents per acre.

The 676,515 acres of public lands in Hinsdale County represents 95% of the county. There are only about 37,000 acres of private land. This means that 305 miles of the 326 miles of county roads are located on Federal lands. In summer months, the population of Hinsdale County swells as much as a twenty-fold. The influx of recreation seeking visitors creates extreme law enforcement challenges which carry commensurate costs. In fact, a former Hinsdale County Sheriff was killed on public lands by a poacher. Local property taxes for the 37,000 acres of private lands averaged \$9.91 per acre, compared to the ten cents per acre averaged for the PILT payment.

In Rio Blanco County we have a similar situation. Approximately 500 miles of the 900 miles of county roads are located on Federal lands. The county is impacted by extensive natural resource activities on these Federal lands. We have oil and natural gas production, coal production, nacholite (or sodium bicarbonate) production, plus considerable hunting, fishing and recreation activities. Quite frankly, Rio Blanco County cannot adequately keep up with the demand for local services. We need your help. Rio Blanco County is also facing the future development of the world's richest deposit of oil shale. Shell Oil Company is currently operating a research facility in our county that looks promising. Development of these critical national resources requires extensive infrastructure investment at the local level; particularly if the development is going to be done in a manner which sustains important ecological values.

This year, the state and local governments in Colorado, across the west and in fact across the country, face increased fire fighting costs due to the high risk of catastrophic forest fires this summer. I am concerned that Colorado faces a real threat of more future fires from eco-terrorists. We have suffered previous eco-terrorist attacks in Eagle County, where a ski lodge was burned, and in Boulder County, where a new home was burned. When well-meaning mainstream environmental organizations express concern over efforts to reduce fire risk through fuel treatment programs outside the wildland urban interface, I fear that the more radical fringe groups may initiate eco-terrorist activities to stop programs they oppose. In any event, whenever any of these fires spread to private lands, suppression becomes a state or local responsibility, and a costly one, at that.

The National Association of Counties also supports fully funding the Refuge Revenue Sharing program through H.R. 1005. The acreage in wildlife refuges managed by the U.S. Fish & Wildlife Service is not automatically PILT entitlement acreage. In fact, if it was acquired by the Fish & Wildlife Service from private owners, it is not covered by PILT. The Refuge Revenue Sharing program is how local governments are compensated for this special category of Federally owned tax-exempt land. This program is particularly important in states outside the west where most of the wildlife refuges were not carved out of the public domain but have been ac-

quired by the Federal Government from private landowners. For example, in FY 2003, counties in the State of Maryland received over \$290,000 in Refuge Revenue Sharing, but only about \$92,000 in PILT. Similarly, Delaware counties received about \$126,000 in Refuge Revenue Sharing, but only about \$3,000 in PILT.

Some have suggested that PILT does not need to be funded at its full authorization because many counties receive payments under programs like the Secure Rural Schools and Community Self-Determination Act (PL 106-393), thus implying that counties are overpaid under Federal programs. Please remember the facts:

1. The National Forests have produced billions of dollars of revenues to the Federal treasury in recent years. Furthermore, Title II projects under PL 106-393 will add millions more in badly needed revenues for Federal forest restoration projects selected collaboratively by Resource Advisory Committees.
2. National forest moneys to counties under PL 106-393 are dedicated to roads and schools. PILT payments are flexible, discretionary general funds, needed to pay for the services counties must provide to visitors of these Federal lands and to the lands themselves (e.g., public health and safety, search and rescue, solid waste treatment and disposal). These two programs serve different, but critical functions, yet both relate directly to tax-exempt Federal lands.
3. PL 106-393 Title I and III payments reduce the amount of PILT payments received by a county. By operation of the PILT formula, when the Federal Government increases its support for roads and schools, it reduces its support of the other Federal land-related local services counties must provide. For example, Crook County, Oregon, saw its PILT payment drop from \$824,141 in FY 2002 to \$170,812 in FY 2003! Chelan County, Washington, received \$1,131,714 last year and only \$857,298 this year. Tehama County, California, dropped from \$324,602 to \$81,184. In rural areas where vast stretches of Federal lands are located, this is real money that cannot be replaced.

The uniqueness of both the Payment in Lieu of Taxes (PILT) program and of natural resource revenue sharing programs must be explicitly recognized and strictly maintained. PILT must not be confused with the various revenue sharing programs which are linked to natural resource development and usually have strings attached as to their use.

NACo believes that Congress was correct to enact PILT and Refuge Revenue Sharing legislation to compensate counties for the tax-exempt status of Federal lands and to help defray some of the local costs associated with activities on these lands. As a county official actively involved in NACo's efforts to secure equitable funding for these programs, I urge you to approve H.R. 1005. This bi-partisan legislation would provide a much needed and secure level of funding of annual PILT payment to public land counties throughout the country.

Thank you for this opportunity to testify.

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Mr. McINNIS. [Presiding] Don, I wasn't here. I was out of the room temporarily when you first came up. Thank you very much for coming. You have been a terrific participant on these issues over the years, and I appreciate very much your service as a commissioner up there. I know you are well-respected in your area.

Do we have any questions by members of the panel? Go ahead, Mr. Pearce.

Mr. PEARCE. Thank you, Mr. Chairman. I would direct a question at Mr. Kearney.

My district is about 9 hours to get across it, and that is at 75 miles an hour. It is very large, it is very rural. One of our western counties, Catron County, for example, has about 18,000 square miles. New Mexico is 60 percent public lands. The budgets in our counties with a high percent of public lands are being decimated. In Catron County alone we have lost 250,000 animal units. That is a tremendous piece of their tax base to run the functioning of the county.

If you think that the PILT payments should not be fully funded, what are these counties to do as they continue to be affected by the Endangered Species—that is taking—your Department, in a lot of cases, is affecting the tax base tremendously. Then you have people

who are moving into these areas and voluntarily taking animal units off. Ted Turner has bought a lot of land in New Mexico and has really taken a lot of the productive assets off of those lands.

What are these counties to do if we are not to—if you are going to continue to buy up land from the Federal Government and continue to erode the tax base, exactly how do you perceive that these counties can function?

Mr. KEARNEY. Well, sir, I think those are challenges that are increasingly growing in your area and elsewhere around the West, and we are keenly aware of them. We think that there are a number of programs throughout the Department, a number of activities throughout the Department that perhaps can be of assistance in trying to deal with some of those issues, other than those dollars. And I think that we would be happy to work with you and your staff on specific problems and challenges you are facing in those issue areas with respect to how we can best address them across the board in terms of the different programs and agencies that we have. There are an enormous number of agencies and programs that we have that we think can also try to be helpful with that.

Mr. PEARCE. Thank you, Mr. Kearney. The term “assistance,” if you give assistance, frankly, these people just want to make their own living. A lot of the farmers and ranchers have existed there for generations. On these allotments and the permits, the grazing permits are being taken away from them and not renewed. At some point you are not going to have any ranchers who are willing to take that. And if you think that there is a mess on public lands today that are burning without ceasing in the West, if you take the animal units off, if you take the grazing off, then I think the environmental damage is going to be extreme, because the field load buildup is going to do that.

And as you were talking about the programs in the Department that are affecting the life—and your willingness to offer assistance, the wolf introduction program is occurring in Catron County. They got rid of the wolves because they were decimating the livestock population out there, and now they are being reintroduced. And not only that, but it is not just wolves that are being reintroduced. They are taking the problem wolves from my friend Mr. Renzi’s State, the ones that are too dangerous there, kill too much livestock, do too much damage, they bring them over and put them in the corner of my State and then I am not really too appreciative of that because I get to answer the questions when I go in and talk to my constituents.

And so instead of providing assistance, your agencies are providing more economic damage to a very, very troubled economy—to individuals, but also to the counties that are trying to function with decreasing budgets. Do you—what about some of the programs that are causing such disarray? I will let you answer, and that is my last question. Thank you.

Mr. KEARNEY. Sir, we understand that there are problems and challenges out there on the land that are affecting ranchers and grazers and all the issues that you have addressed, and we are working hard to make sure that we fully appreciate the impacts of all of the things that are happening on the land and that we are working with the people on the land to try to deal with those

issues, and stand ready to try to do that and address them any way that we can.

Mr. MCINNIS. Thank you, Mr. Udall?

Mr. MARK UDALL. Mr. Chairman, thank you. I will be brief. I wanted to welcome Commissioner Davis as well, and clarify for the record that you are from Rio Blanco County.

Mr. DAVIS. Yes.

Mr. MARK UDALL. It is always great to have a Coloradan here.

I just wanted to associate myself with the Chairman's legislation, and make a remark to the effect that PILT is especially good because it provides certainty to the counties. And it doesn't link payments to management decisions, so that commissioners in whatever county it may be aren't forced to weigh in on all the portfolio of public lands issues—timber, mining, wilderness, water projects, anything that has to do with affecting your revenues.

So if we could get this done, and I want to urge the administration to be creative in looking at how we pass this legislation and fund it, then you all could turn your attention to some of the pressing problems and opportunities you have instead of every year having to fight for your PILT funding.

So I want to again thank the Chairman for this very important piece of legislation for westerners, and a number of easterners as well.

Thank you, Mr. Chairman. I yield back.

Mr. MCINNIS. Thank you, Mr. Udall.

I would like to, before I go to Mr. Cannon, just to mention one thing about the PILT and so on. As you know, Mr. Davis—you and I have talked on a number of occasions—PILT is but a small part of the reimbursement if you consider the entire impact to the area. I have noticed recently that in some of the water debate that is going on within the borders of our State, that some have said, well, we are going to pay payment in lieu of taxes and you ought to be satisfied. Well, that does not satisfy the mitigation that is required. PILT is just a partial reimbursement to assist the counties in the impact.

So I would—I am saying this not so much for our people in attendance today, but for the permanent record. We do not—despite the fact that PILT has never really been fully funded, even if it was, even if we got everything we wanted under PILT, it is only a partial mitigation of the impact that results from some of these lands, which run all the way from water diversions to roads, as Mr. Udall said, and some of the services that are rendered.

With that, Mr. Cannon, you may proceed. And welcome to the Committee, Mr. Cannon. Also, I want to publicly acknowledge that Mr. Cannon chairs our Western Caucus Coalition, which is kind of the voice of the West. And as many of you know, many of our colleagues here in the east don't really have public lands. The public lands are in the West, the bulk of the public lands. So we feel a voice for the Western Caucus is very important. Mr. Cannon carries out that task very well. I appreciate your service.

Mr. Cannon, you may proceed.

Mr. CANNON. Thank you, Mr. Chairman. I appreciate the opportunity to be here as a member of the Resources Committee, but not of the Subcommittee. I appreciate your allowing me to be here. I

appreciate and thank you for the bill that you have introduced that is before us today.

Let me begin by associating myself with the remarks of my good friend, Mr. Udall. We see differently on many issues in the West, but on this one we see the same thing. Let me just reiterate a couple of points.

PILT is important because you can't jerk it if you don't like what counties do. That is very important for our counties as they make the decisions. Second, Mr. Udall referred to people in the West appreciating this, but also people in the east. We often hear this chant that these are all America's public lands, but America doesn't pay for them. The cost comes in proximity. There is a huge penalty paid by the counties that have these public lands within their borders, and they are not—as the Chairman just indicated, those costs are not covered by this program.

So first of all, let me thank you, Mr. Davis, for being here. We appreciate your perspective on this issue. Mr. Kearney, I have sat on the other side of the—where you are sitting now, and I know that it is sometimes uncomfortable. But let me just express for myself, and I think I express this as a uniform voice for the Western Caucus, we are exceedingly disappointed in the position of the administration on this issue. Exceedingly disappointed. We just fought the issue on the floor in the last few days.

And I am going to give you a chance to respond in just a moment here, but as I read your testimony, it is not adequate. We represent, as you look at the map—some people call it the blue and red map—I call it the red map with blue fringes, because the bulk of the map is rural counties, and that represents the electoral base of this President, and we expect, in this particular case, to have response.

Are you familiar, Mr. Kearney, with the work by my—the Speaker of my House of Representatives in Utah, Marty Stevens? He calls it “Apple—”

Mr. KEARNEY. Yes, sir. He has been in to brief folks at the Interior Department, yes, sir.

Mr. CANNON. Do you recall the conclusions from that presentation, about how Federal lands in western states affects the funding for schools?

Mr. KEARNEY. In essence, one of his concerns, as I recall, was that there has been an increased demand in counties in his and other States where the increased population has put an increased demand on education without—

Mr. CANNON. I think you have missed the point. What he has done here is a gross look at the West versus the East. He has looked at the percentage of taxes that people pay in western States, he has looked at the percentage of the budget that States apply toward education, and what he comes up with is a yawning gap between what is paid in the West for education and what is paid in the east. So we are taxed more heavily, we pay more heavily, and the only difference, adjusting for everything else, the only difference is the public lands that we have in the West.

So we get to pay the cost of those public lands in our higher taxes, in our lower expenditure on children, and you say to us today that the administration strongly opposes, or is opposed to

H.R. 1005 because it would force the Federal Government to either raise taxes or cut other programs.

Now, with all due respect, isn't this a matter of adjusting priorities, not cutting programs? We have cut taxes. This administration has cut taxes. In the process, we are going to re-juggle things. Would you mind addressing that issue, particularly the issue of whether we are going to have to raise taxes; second, whether we don't have room to fix this program in place, since our counties have to count on it; and finally, if it is a priority and we are going to do it anyway, why not do it the way this bill suggests?

Mr. KEARNEY. Mr. Cannon, there is no question that this program and the issues associated with this program and the demands that it places on the counties are of critical importance and a challenge that has to be addressed. We are, within the confines of the budget the President has submitted and the position of this administration with respect to mandatory spending being clear, however it is also clear that we believe strongly in the program, strongly in what it is trying to do. We have provided, I believe, an unprecedented increase in this program with respect to past years and, frankly, within the context of the overall Interior Department budget. With respect to that, we have gone well above. We are somewhere on the order of 20 percent over what the rest of the programs within the administration budget for Interior received. We are much closer to what Congress is on track to provide for this program. We are addressing administrative changes with respect to the money.

Mr. CANNON. But I don't think you are answering the question that I asked, if you don't mind.

Mr. KEARNEY. In terms of prioritization, there is no question that there are a variety of priorities that have got to be addressed, and this is one of them. And within the constraints of the budget that the administration has submitted and the position of this administration, I think we have demonstrated that it is one of the highest priorities at the Department of Interior, as well as also recognizing that we do have other priorities in addition to that in terms of matters related to homeland security, in terms of fire, in terms of education—other programs that affect the West and western counties as well—in the broader budget of the administration.

So it is, we believe, a high priority of the administration with respect to—within the confines of the budget that we have and the setting of the priorities.

Mr. CANNON. Mr. Chairman, may I ask unanimous consent for an additional minute?

Mr. MCINNIS. Certainly. You may proceed.

Mr. CANNON. Thank you. Let me just point out that it is not a matter of cutting taxes or cutting other programs. In fact, there are lots of other options. For instance, we have, I think, already identified by the Interior Department 5 million acres of surplus lands. We can sell those lands.

Let me just end by saying that we appreciate the priority that is given the West. We have to do this stuff with homeland security because we have this huge and untended forest and other public lands that could go up in vapor overnight and ruin our environment, kill endangered species, and we have people that have the

animus to do that. So we have to do some of those things. That is not helping our counties. It is nice that that is being done, but that is an American obligation by the American people, and our counties are the folks that are suffering the disproportionate burden. Because every time you guys do—or every time the Federal Government, not the Interior Department—but as the Federal Government creates mandates on our local police, we have to pay them in our counties, and that is a huge disproportionate impact on rural counties as compared with the urban counties.

Let me just tell you plainly. It is the highest priority of the Western Caucus—that is the 125 or so westerners who are associated with the caucus, so I can't speak for all of them, but I am pretty sure that most of them have that view, and the 50 or 60 that are active and regularly involved in the Western Caucus—to get PILT funded fully up to the level of the appropriation. And we want to raise that over time.

Secondly, this bill is of major importance. I suspect you will find that the Western Caucus members are going to focus on this over this next few months, and we will weigh in again and again and again until we solve this problem. Solving the problem is raising the funding and making it permanent.

Thank you, Mr. Chairman. I yield back.

Mr. MARK UDALL. Would the gentleman yield?

Mr. CANNON. Certainly. Whatever remains of that minute.

Mr. MARK UDALL. Just briefly. I have been listening intently trying to find a place where I could disagree with my good friend Mr. Cannon, and I can't. And so I further want to associate myself with your remarks and let this administration know that this is a bipartisan effort on the part of western members of this House, to fully fund PILT and, as the Chairman has said, make real the promise that has been presented for so many years to western counties.

Mr. CANNON. I thank the gentleman for that. I am wondering if we are going to get lightning or something here. This is at least a historic moment. I thank the gentleman.

Now, I suggest that as you consider this, it is not just the Western Caucus, but a huge number of people who have a bipartisan interest. I think I can speak for those people that I deal with often who are northeastern Republicans, who often disagree with us on western issues. I don't think you are going to find a bit of disagreement on this issue. That is, that they are going to want—they understand that there is a disproportionate burden, they are my friends and the friends of other members of the Western Caucus. They are going to want something to happen here. And we are clear on this point and want to express that we the greatest clarity that we possibly can.

Thank you, Mr. Chairman, and I do yield back.

Mr. MCINNIS. Thank you, Mr. Cannon and Mr. Udall.

I would just note, for sensitivity purposes, that in the statement which is being referred to, the language "because it would force the Federal Government to either raise taxes or cut into other programs," what the Federal Government needs to realize is that they have forced Mr. Davis and his county to either raise taxes or cut into other programs. So it is really kind of ironic that the Government comes, takes the land off the tax rolls, forces the local county



to have to subsidize or raise taxes, and then when it is time for them to pay their fair share, they say, oh, my gosh, we don't want to have to cut our programs. It just ain't good.

So to wrap this up, Mr. Davis, do you have anything else? I know some points have come up that you might want to answer.

Mr. DAVIS. Mr. Chairman, your last remark is very much to the point. And as you know, in Colorado, county commissioners don't raise taxes. It takes a vote of the people. And we recently attempted to do that, because our economy is going the way of many economies across our Nation. And the people said no. So we have done all the liposuction on the fat that we can, and we are now—we are watching the blood flow. And it is very serious. This is one program that could help us.

That is one point. And another is, it isn't all the West. Last year I sat here with a lady from North Carolina. There are many eastern states that have PILT. As a matter of fact, I think the only one that does not have PILT is Rhode Island.

Mr. CANNON. Would the Chairman yield for just one more comment.

Mr. MCINNIS. Yes, sure. Go ahead.

Mr. CANNON. I would ask you, Mr. Kearney, and I know you have to run this stuff through—your testimony through OMB, but you may want to take a pencil or yell at those guys and not let them force you to say things like “the problem here is raising taxes or cutting programs.” That is something that I think you guys can control in Interior. At least you ought to be yelling at them if they insist on that kind of language, which is deeply offensive.

Thank you, Mr. Chairman. I yield back.

Mr. MCINNIS. Thank you, Mr. Cannon. I know that, at least as Chairman of the Committee, I have had a number of discussions with Mr. Renzi on this issue, on this particular issue. Mr. Renzi, if you wouldn't mind, I would appreciate you just kind of covering some of that area real quickly.

Mr. RENZI. Yes, thank you. In a matter of saving some time, I will hold my questions, which were really covered by Mr. Cannon.

I just want to associate myself with my colleague Mr. Pearce's comments about the wolf and the way we treat our neighbors out west. That rare and endangered wolf introduction program turns out, as we found out recently, and we suspected early on, that these wolves also have now dog DNA in them. And so these hybrid wolves that are destroying many of the cattle in the West, and particularly putting some of our ranchers out of business, it turns out they contain dog DNA. Not even they are hybrid wolves.

So I lend myself to the comments of my colleagues as it relates to wanting to see the PILT program fully funded and, hopefully, these increases that we are hoping for, I think—did you mention 21 percent? Hopefully we will see that begin to grow.

Thank you, Mr. Chairman.

Mr. MCINNIS. Are there any further questions by the members? Seeing no further questions, I want to thank the panel. Thank you very much. I appreciate it. As you know this is a very high issue of interest, would be a good way to put it. So thank you again. Appreciate it, and appreciate the distance you have traveled. We will now call up our witnesses for H.R. 2707. Ms. Estill and Mr. James

Tate, with the Department of Interior. Mr. Stenholm, thank you for coming. If you would like to join us at the dais, you are more than welcome to, or at the table, whatever your choice would be. Go ahead and be seated. Thank you very much for coming.

Because of the size of the panel, we are going to do the panel in two sections. We will do the first people that I have called, and then we will bring up the second panel. We will withhold questions until we have had both panels make their presentations.

I am pleased today to have Mr. Stenholm and Mr. Pearce both come to the Committee for testimony on this. Mr. Stenholm, I will let you begin with your statement, and then we will move to Mr. Pearce, and then on to the rest of the Committee.

[The prepared statement of Mr. McInnis on H.R. 2707 follows:]

**Statement of The Honorable Scott McInnis, Chairman,  
Subcommittee on Forests and Forest Health, on H.R. 2707**

Today the Subcommittee will consider Tamarisk eradication legislation offered by my friend and Colleague Stevan Pearce, who I want to personally commend for his hard work and leadership on this important issue. I look forward to hearing from all of our witnesses today, including my old friend Dr. John Redifer from Colorado, and working with the Members of this Committee over the coming weeks to get Tamarisk control legislation enacted into law.

Every year billions of gallons of the West's water—that's right, I said billions—are sopped up by a tenacious and all-too-prevalent invasive tree called Tamarisk, or Salt Cedar. If you've been out kayaking or rafting the Colorado River, or gone fly-fishing on one of her many tributaries, you've seen this harmless looking tree—it seems to be everywhere.

But make no mistake about it—this non-native vegetation is anything but harmless. Tamarisk is the equivalent of a massive rat hole on the West's waterways. It is robbing the West blind of its most cherished commodity—water.

Consider these facts:

When it comes to water in the West, it's not too often that you find an area on which everyone agrees. But in Tamarisk, it appears that we finally have a common enemy. Upper basin States, lower basin States, California, Colorado, environmentalists, fisherman, those who want more dams, and the "flat-earthers" trying drain Lake Powell—all seem to agree that a massive Federal, state, local and private effort is needed to yank this unwanted invader from the banks of the West's rivers and streams.

Congress can't make it rain, but giving land managers the tool to eradicate Tamarisk isn't a bad days work. It's a big challenge, and it won't be cheap or easy—we should have no illusion about that. But it is a no brainer

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Mr. McINNIS. Mr. Stenholm, you may proceed.

**STATEMENT OF HON. CHARLES W. STENHOLM, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. STENHOLM. Thank you, Mr. Chairman. Thank you and the members of the Committee for allowing me to testify here this morning. I commend the Resources Committee for taking such swift action on this bill that my colleague, Congressman Steve Pearce, and I have been working on so diligently.

The effects of the salt cedar and Russian olive invasion can be seen in more than half of the continental United States. I am glad today's panel includes scientists, individuals working in the field to control this non-native species, and I will gladly leave the science on this issue for them to explain.

I want to take this opportunity to emphasize the importance of brush control demonstration projects and outline the benefits of these programs for our communities in western United States.

I represent the 17th Congressional District in the West Central part of Texas. As in much of America, drought has certainly left its mark on West Texas. As a result, salt cedar proliferated in this area as receding waters left ideal conditions for growth of this invasive plant. The devastating results, evident throughout the Upper Colorado River basin, have become more acute in recent years as the salt cedar invasion has severely diminished the availability of fresh water supplies.

Not only is this the largest waste of fresh water in the West, but salt cedar increases soil salinity and fire frequency. It develops into monotypic thickets that displace valuable native plant and tree species, and has virtually no economic or environmental benefit. To underscore the devastation this plant causes, I offer this example. The Colorado River Municipal Water District estimates that the salt cedar consumed more water in 2002 than the district's largest municipal customer, a city with more than 100,000 people.

The combined capacity of the district's three reservoirs fell below 25 percent during 2002, and it became readily apparent that salt cedar was robbing municipalities of this precious resource. The district has worked closely with many Federal, State, and local entities to begin brush control projects within the Colorado River watershed. In cooperation with private and public land managers, the Colorado River Municipal Water District implemented salt cedar control projects with reasonable success. Further, private land owners have partnered with the Natural Resources Conservation Service to employ brush control on their properties, and in some cases the dormant streams and creeks have again begun to flow where those brush control projects were put into action.

I am convinced this bill moves in the direction toward real solutions to the salt cedar and Russian olive invasion. It outlays the framework for private and public land managers to cooperate with the Department of Interior, USDA, Army Corps of Engineers, local soil and water conservation districts, and State agencies to work together in these demonstration programs. After all, it will take integrated control and management practices to significantly deter further spread of this non-native species.

I believe Congress should play an integral role in the mitigation of these invasive pests, since much of the invasion has occurred on Federal lands. More importantly, Congress cannot ignore the fact that Federal agencies introduced the use of Russian olive to minimize soil erosion in riparian areas. Since that introduction, these plants have spread throughout the United States, and therefore we must take a proactive approach to restore our public and private lands to healthy levels.

The fact remains, to minimize the wasteful reductions in our Nation's water supply, Congress must take immediate action to implement a control plan for salt cedar. I have worked closely and tirelessly during my time in Congress to address the scarce water situation in West Texas. I can attest that brush control efforts have produced most lasting results in the 17th District. Like most of the United States, West Texas has been devastated by drought, highlighting the importance of developing a long-term plan to ensure that communities will have an adequate supply of drinking water. In the 17th District of Texas there is virtually nothing of greater

daily concern than the availability of fresh water. And while our demand for water grows, the supply dwindles. In order to meet projected water needs, we must develop integrated plans to increase supplies while reducing demand for water.

I close by saying that, unlike a barrel of oil, it is tough to put a price on clean, fresh water.

Thank you, Mr. Chairman, for allowing me to testify.

Mr. MCINNIS. Thank you, Mr. Stenholm.

Mr. Pearce?

**STATEMENT OF HON. STEVE PEARCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO**

Mr. PEARCE. Thank you, Mr. Chairman. I would like to thank you for your willingness to address this problem by holding hearings. I would also like to express my appreciation for you and your staff for working diligently with me to produce this bill.

Also, thanks to Mr. Stenholm, who has been tireless in working with me on the bill, and for the hard work that we are doing to ensure passage of this important measure.

I would also like to thank Mr. Tom Davis, who is on the panel today. He is the president of the Carlsbad Irrigation District. He is here to testify. He has long been involved in salt cedar eradication. His testimony will share valuable experience and knowledge as we move forward. Mr. Davis is the one who almost single-handedly tries to balance the water needs of the southern portion of New Mexico, where the Pecos runs into Texas.

Mr. Chairman, as you know, salt cedar and Russian olive are both invasive species that adversely impact the water supply. They increase soil salinity, they lower the potential water that soil can hold, and increase the fire frequency. Just a few weeks ago, in Albuquerque, several hundred homes along the Rio Grande River burned, forcing about 600 people to be evacuated from their homes. This fire burned many of the native cottonwood and willow trees. One of the main culprits being blamed for the escalation of the fire is the large amount of underbrush that had collected. Most of that was salt cedar. Without the buildup of salt cedar, the fire probably would not have burned as extensively or with the intensity that it did.

One of the problems that is caused by the salt cedar is an inability to deliver the water to Texas that the Supreme Court has allocated. As you know, the Supreme Court made compacts between all of the States to determine the amount of water that each State gets. In specifically dry years, the upstream States are put at extreme disadvantage, and then, with the invasion of species that are sucking the water out of the river, deliveries are extremely difficult, causing economic chaos as disarray as well as the inability for communities to have the water which they deserve and need.

The particularly difficult piece of this whole equation is that this plant is not native. It is a non-native species that was imported and is now being used by environmental communities to establish habitat and to establish the reasons for habitat being recognized. Salt cedar is widely distributed and is extensive along riparian areas in the western United States, particularly along Colorado, Rio Grande, Pecos, the Gila rivers. Controlling and, hopefully 1

day, completely eradicating salt cedar and Russian olive is important. As we eradicate salt cedar, we will increase the flow of water in streams, springs, and rivers, restore native plants that are less water-consuming, and improve habitat.

Because of the widespread nature of salt cedar and Russian olive, there have been many projects to clear these trees and then to estimate how much water was saved. The increased stream flows and water restoration estimates vary widely. The high range is from 69 acre-feet saved per year down to a low of between 0 to 1.5 acre-feet per year per acre cleared. The last estimate is based on a study done by the USGS on the Pecos River in New Mexico.

H.R. 2707 directs the Secretaries of Interior and Agriculture to implement demonstration projects over large acreages and time scales in order to monitor the actual saved water on both surface and ground water. This information will allow the Secretaries to formulate a comprehensive management plan, including cost, and distinguish when and where eradication methods are most effective. Almost everyone can agree, regardless of what side of the political spectrum they are on, that controlling salt cedar and Russian olive for water salvage, riparian restoration, salinity control, fire control, and habitat restoration is a positive benefit. However, without the input of good scientific input, this task may well prove to be impossible. H.R. 2707 will provide the sound scientific basis needed for our continuing to contribute new, innovative approaches and solutions.

Again, thank you, Mr. Chairman, and Mr. Stenholm. I look forward to working with you to make any changes and improvements to this bill and secure passage so this important work can move forward. I yield back the balance of my time.

Mr. MCINNIS. Thank you, Mr. Pearce.

Ms. Estill?

**STATEMENT OF ELIZABETH ESTILL, DEPUTY CHIEF, PROGRAMS, LEGISLATION, AND COMMUNICATIONS, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE**

Ms. ESTILL. Thank you for the opportunity to provide USDA's views on H.R. 2707, the Salt Cedar and Russian Olive Control Demonstration Act, which directs the Secretary of Interior and the Secretary of Agriculture, acting through the Forest Service, to carry out a demonstration program to assess potential water savings through control of salt cedar and Russian olive on forest and public lands under their jurisdiction.

One of the greatest threats to the national forest is this spread of unwanted, invasive species. The Department agrees completely with the goals of H.R. 2707, which would provide important information for managing two non-native invasive species that, as we have heard, pose significant ecological threats in the western United States. However, the Department has some concerns and would like to work with the Subcommittee to clarify and improve the bill.

The genus *Tamarix*, commonly known as salt cedar, is comprised of shrubs or trees native to arid saline regions of Eurasia and Africa. Since the 1830's, ten species have been introduced into North America as ornamental plants and for windbreaks. Two species of

salt cedar have escaped cultivation and rapidly invaded riparian areas of the western United States. Today, salt cedar has infested over 1 million acres in the western United States, consuming large quantities of water, intercepting deep water tables, and interfering with natural aquatic systems. It disrupts the structure and stability of native plant communities and degrades native wildlife habitat.

Russian olive is also a native of southern Europe and western Asia that was first introduced in the last 1800's as an ornamental tree and windbreak. Although it is a non-native invasive species, Russian olive is also a popular and hardy plant that is sold commercially for landscaping purposes. However, as its impact to native species has become evident, it has been declared a noxious species in some States, and sales have been banned in others, such as Colorado. Like salt cedar, Russian olive is a fast-growing plant that can out-compete native vegetation and tax water reserves.

We would like to work with the Subcommittee and the Department of Interior to clarify the roles of the departments and the agency referenced in the bill, to specify components and requirements of the assessment report, and to develop criteria for selection of the demonstration project areas.

Land managers in communities are currently stretching their limited resources to address the ecological problems posed by these two species. The increased understanding of the impacts of these species on the quantity of surface and ground water, as well as the effectiveness of various treatments, would advance our Nation's ability to avoid or reduce undesired ecological consequences.

This concludes my statement. I will be happy to answer any questions.

Mr. McINNIS. Mr. Tate?

**STATEMENT OF JAMES TATE, SCIENCE ADVISOR TO THE  
SECRETARY, U.S. DEPARTMENT OF AGRICULTURE**

Mr. TATE. Thank you, Mr. Chairman, members of the Committee. I am Jim Tate, science advisor to the Secretary of Interior, Gale Norton, and a former resident of Golden, Colorado. Seems like everybody here is from Colorado.

I want to thank you for providing the Department of Interior the opportunity to testify on H.R. 2707. The Department of Interior supports the goals of H.R. 2707 and we are committed to working with you to ensure the program established will be both effective and efficient in the control and management of two of the invasive weeds that are affecting our Nation's economy and its ecology.

This legislation focuses on two of the dozens of weed species that plague our public and private lands. These two groups of weeds—salt cedars, or tamarisk; and olives, both Russian and autumn—are similar in many ways. They have been shown to out-compete native vegetation, confound water management, and cost our economy millions of dollars. And they are different, in that salt cedar is established on millions of acres, but olives, by comparison, are just getting a good foothold.

Studies conducted since the 1950's have shown that dense tamarisk stands utilize more water on a daily basis than native cottonwood, willow plant communities. Based on these studies,

estimates have been made that water lost for irrigation, municipal uses, flood control, and hydropower run between \$133 million and \$265 million. Irrigation losses alone are as much as \$120 million annually.

But I have to suggest caution in how we say these things about the use of water by tamarisk, in particular. The use of water is divided into evapotranspiration—the water that is utilized by the plant itself—and other effects on water management, such as percolation of water into the alluvium, when the water is slowed down by dense stands. Water released for irrigation purposes from an upstream reservoir may not even get to their intended destination when tamarisk is blocking the channel. The effects of tamarisk and olive on other natural resource values have been documented as well and are equally as important as the water-management confounding effects.

Currently DOI, the Department of Interior, uses strike teams to manage invasive plants on Federal lands, both in the Fish and Wildlife Service, where these teams are being developed, and modeled after the National Park Service's exotic plant management teams. In some cases, such as olives, the resources potentially at risk have been detected early enough and can be spot-treated to avoid costly control efforts that might be necessary for tamarisk. This early detection and rapid response model is receiving increased attention as a means of preventing the spread and establishment of olives.

But areas with well established species such as salt cedar require considerably more effort to manage. There, we have trained and certified specialists that clear areas vital to wildlife resources, and they use integrated management plans that involve both mechanical, chemical, and even physical means of removing the plants. Our National Wildlife Refuge at Bosque del Apache has served as a demonstration laboratory for the control and management of tamarisk, and that is a place we have been doing quite a bit of research.

We do believe some additional research is needed. As identified in H.R. 2707, more precise information is needed on the extent of infestations, management options, control methods, strategies. Most urgently, more information is needed on areas that would most likely respond to restoration projects, and this would be needed to help develop an integrated control and restoration plan—a sort of best practices plan—that will provide land managers at all levels of Government with the options available to them for control.

The Department currently promotes partnerships with private land owners, and there are a number of such programs mentioned in my written testimony.

Currently, the Departments of Interior and Agricultural are co-operating in a cross-cut budget for Fiscal Year 2004. This is an interagency approach to invasive species control. This is a performance-based cross-cut, where the agencies work together to identify appropriated money directed to specific invasive species, such as tamarisk, and to develop common performance measures for the use of those monies. Under this performance umbrella, identified new and base funds will be applied in the Departments of Interior and Agriculture to control and manage the spread of tamarisk.

As a means of deciding how to spend the Fiscal Year 2004 funds proposed in the President's budget, the Department is considering a strategy workshop to be held in the West sometime this fall. The purpose would be to gain stakeholder input for our roadmap containing common protocols and decision criteria, best practices for tamarisk-control management.

I will finish up very quickly. I see my time has expired.

The Departmental views on H.R. 2707, we view the comprehensive assessment called for in Section 3(a) very positively, and we believe such an approach helps Federal land managers develop a more coordinated long-term approach.

Section 3(b) would require the Secretaries of Agriculture and Interior to initiate demonstration projects. We recognize the importance of carrying out strictly controlled projects that would provide us with practical control methods; however, the language in this subsection, when viewed in combination with Subsection 2(a) and Subsection 3(d), does not make clear which secretary and how the program would be initiated.

The legislation would authority \$25 million for each of fiscal years 2004 through 2007. We are concerned the bill does not provide sufficient direction on how the appropriated funds could be distributed.

And we also have concern about the overall costs of the program. While the administration's cross-cut budget evidences our commitment to controlling invasive species, the program established under this legislation would have to compete with other priority activities within the context of the President's budget.

And finally, the Department notes that the actions called for in H.R. 2707 can be achieved within existing authorities.

Thank you for the opportunity to comment.

[The prepared statement of Mr. Tate follows:]

**Statement of Dr. James Tate, Science Advisor to the Secretary of the Interior, U.S. Department of the Interior, on H.R. 2707**

Mr. Chairman and Members of the Committee, I am Jim Tate, Science Advisor to Secretary of the Interior Gale Norton. I want to thank you for providing the Department of the Interior (Department) the opportunity to testify before you regarding H.R. 2707, legislation to promote the control and management of the invasive species saltcedar, or tamarisk, and Russian olive. The Department supports the goals of H.R. 2707, and we are committed to working with you to ensure that the programs it establishes will be both efficiently delivered and effective.

Let me begin by providing you with some background on this issue, followed by brief comments on the legislation.

*Background*

In the late 19th century, importation of several species of the genus *Tamarix*, commonly called tamarisk, which now interbreed in the United States, and Russian olive came just as the Department began efforts to mediate land speculation and work closely with western governors and Indian tribes during the turbulent settlement of the West. The scientific expeditions of John Wesley Powell (which carried out the Geographical and Geological Survey of the Rocky Mountain region in 1874) set in motion the still-evolving paradigm that wise development informed by science provides the best hope for conservation and future use of our Nation's natural resources.

The Department is one of the Nation's principal conservation agencies, charged with protecting and providing access to our Nation's natural and cultural heritage. Today, Departmental authorities provide for the management and protection of resources in an area of the West now increasingly under pressure as population densities mushroom and water resources are increasingly stressed. This region of



the country also has seen the greatest impact from the species addressed in this legislation.

#### *Scope of the Problem*

Russian olive is a hardy, fast-growing tree native to Europe and western Asia. It was introduced into the United States in the 19th century and was promoted as windrow and ornamental plantings. It grows along streams, in fields, and in open areas. It is shade-tolerant, and it grows well in a variety of soil and moisture conditions. While Russian olive is primarily found in the West, it also is present in the Eastern United States.

Tamarisk comprises a suite of several species also imported to the United States in the 19th century for use as windbreaks and erosion control plantings. It now covers approximately 1.6 million acres of riparian lands within all the seventeen western states (as far north as Montana). The spread of tamarisk, estimated at 50,000 acres per year, is often supported by its flammability. It rapidly produces dense biomass and secretes salt on the soil that suppresses native plant seed germination and seedling growth.

Preliminary studies have shown that dense tamarisk stands utilize more water on a daily basis than native cottonwood-willow plant communities. There is more total surface area on the leaves of tamarisk plants than on cottonwood and native shrubs growing in a given area, and tamarisk continues to release water through the pores in its leaves during mid-day, whereas native cottonwoods shut this process down to conserve water. Tamarisk growing in the streambed can also slow the water flow, allowing additional time for percolation of the water into the alluvium. Water released for irrigation purposes from an upstream reservoir may thus not get to its intended destination when tamarisk is blocking the channel.

Estimates of the value of water lost—for irrigation and municipal uses, flood control, and hydropower production—run between \$133 million and \$265 million. Irrigation losses alone are as much as \$120 million annually. See, e.g., Zavaleta, "Valuing Ecosystem Services Lost to Tamarix Invasion in the United States," in *Invasive Species in a Changing World*, ed. Harold A. Mooney and Richard J. Hobbs (Washington, D.C.: Island Press, 2000), 261-300.

The growing abundance of tamarisk along western rivers has led resource managers to seek to control it in order to: (1) increase the flow of water in streams that might otherwise be lost to evapotranspiration and percolation; (2) restore native vegetation along the banks and floodplains of rivers and shorelines of reservoirs or lakes; (3) reduce hazardous fuels; and (4) improve wildlife habitat.

As you know, the Department, through the Bureau of Reclamation, has a significant role in the distribution of water throughout much of the West and Southwest. Because of its significant impact on water resources alone, the Department has a strong interest in the control of tamarisk as part of its management efforts. For this reason, much of the remainder of my statement will focus on control efforts for this species.

#### *Current Departmental Tamarisk Management Efforts*

Current Departmental programs and activities focus control and management efforts for tamarisk on areas with resources at risk. Some areas are so heavily infested that expert "strike" teams have been used to remove the dense vegetation. For example, the U.S. Fish and Wildlife Service (FWS) is in the process of establishing such "strike teams," modeled after the National Park Service's (NPS) Exotic Plant Management Teams (EPMT), to combat invasive species, including tamarisk, in the Southwest. Areas vital to wildlife resources are cleared using mechanical, chemical, and physical means. Comprehensive conservation plans are used to guide these efforts and to indicate the areas of highest priority for waterfowl, endangered species, or other wildlife habitat values. In some cases, resources potentially at risk from tamarisk incursion are spot-treated early enough to keep the plants away, thus avoiding costly control efforts. This early detection and rapid response model is receiving increased attention as a means of preventing the spread and establishment of tamarisk.

#### *Place-based Research and Testing*

Departmental land management operations focus significant funding for tamarisk control on refuges, national parks and monuments, and along irrigation canals under the jurisdiction of the Bureau of Reclamation. Bosque del Apache National Wildlife Refuge has served as a demonstration laboratory for control and management of tamarisk, including research and development of innovative methods for restoring native riparian vegetation and working with nearby private landowners and Indian Tribes to implement them. Biomass removal, intermittent flooding, chemical treatments, and other mechanical methods have all been tested and measured for

effectiveness and efficiency. Cooperating with researchers from nearby universities and other research institutions, such as the Los Alamos National Laboratory, scientists and land managers have also tested methods to reduce the likelihood of later re-infestation by tamarisk.

Because of our role in the management of Western lands, we recognize the need for on the ground management of invasive species like tamarisk. However, we also recognize that there are areas where our control and restoration efforts will benefit from targeted research and development projects. More information is needed regarding the identification of areas or situations that would most likely respond to vegetative restoration projects once tamarisk removal has begun. Such information will also assist in the development of an integrated control and restoration plan—a “best practices” plan that will provide land managers at all levels of government with options for removal, control, and restoration of lands infested with tamarisk.

#### *Programs to Promote Private Partnerships*

Various programs within the Department seek to promote partnerships with private landowners to address problem species like tamarisk. One initiative that addresses these issues is the cooperative conservation component of the challenge cost share programs in the Bureau of Land Management (BLM), NPS and FWS. These programs emphasize building partnerships for the conservation of natural resources and provide expanded opportunities for land managers to work with landowners and others to form creative conservation partnerships. This initiative recognizes that nature knows no jurisdictional boundaries and that, through these partnerships, the Department's land managers can work with landowners and other citizen stewards to tackle invasive species, reduce erosion along stream banks, or enhance habitat for threatened and endangered species. Among other things, in FY 2003 we have funded through this initiative projects that are aimed at the eradication and control of tamarisk, Russian olive, and other invasive plants, and reclamation of impacted lands.

Another program is the FWS's Partners for Fish and Wildlife, which promotes private landowner cost-share projects for habitat restoration, including funds targeted for control of invasive plants and subsequent restoration. The Partners Program has worked with private landowners across the Nation to remove, burn, biologically control, and otherwise combat invasive plants on thousands of acres of wetlands and upland. Tamarisk control is a focus of technical and financial assistance in the Southwest.

The control and management of tamarisk is part of the BLM's Partners Against Weeds Strategy Plan, BLM's Strategic Plan, and the National Fire Plan. The Partners Against Weeds program funds cooperative efforts with landowners to control invasive species. It also funds cooperative outreach and education projects with schools and local and county governments. In one important project, the BLM plans to work with several groups, including Clark County and the communities of Bunkerville and Mesquite in southern Nevada, to remove tamarisk along portions of the Virgin River floodplain. As I noted above, because of its properties, tamarisk poses a potential fire risk to homes, ranches, farms, and recreational facilities in the wildland-urban interface.

This project involves mechanical removal of tamarisk in the project area. The goal of the project is to move away from the tamarisk-fueled, high intensity fires that are now typical of the area concerned and to restore native vegetation, such as the relatively inflammable grasses, sedges, shrub communities, cottonwoods, and willows. Current planning calls for 95 acres of treatment in FY 2004, with an additional 100 acres per year during the following 7-8 years.

The NPS, U.S. Geological Survey (USGS), and the Bureau of Reclamation partner with the Agriculture Research Service and the U.S. Forest Service, both within the Department of Agriculture, and university scientists to develop and test biological control agents, including the beetles used for biological control of tamarisk in the West, on projects to identify and avoid sites where tamarisk is naturally dying out, to conduct studies of stream flow management for vegetation control, and on studies of hybridization to better predict the potential future spread of tamarisk.

USGS scientists can help identify site potential for water salvage, revegetation, and wildlife value, and develop protocols and measures for prioritizing sites for control or revegetation. The USGS also has partnerships with state and county weed departments, the National Aeronautics and Space Agency (NASA), and the Tamarisk Coalition aimed at mapping currently invaded sites and identifying new invasions.

The Bureau of Reclamation leads, along with USDA's Agricultural Research Service, the Saltcedar Biological Control Consortium, a task force comprised of over 40 agencies. The Bureau of Reclamation, in collaboration with Los Alamos National

Laboratory, also develops new technologies for determining the amount of water lost from the Rio Grande River due to tamarisk.

*Crosscut Budget for Fiscal Year 2004*

The Administration is also working toward an interagency approach to invasive species control. The President's Budget Request for Fiscal Year (FY) 2004 contains a performance budget crosscut on tamarisk. Agencies would work together to develop common performance measures. Under this performance umbrella, new and base funds will be applied in the Departments of Interior and Agriculture to control and manage the spread of tamarisk in the Southwest. Within the Department, the BLM proposes to control 2,750 acres of tamarisk with a \$500,000 funding increase. The Bureau of Reclamation, utilizing \$600,000 in new funding, proposes to control 22,000 acres of tamarisk. The FWS has proposed an increase of \$640,000 for treatment of tamarisk and other species on an additional 50,000 acres, and the NPS, utilizing \$200,000 in base funding, proposes to treat 1,000 additional acres. A proposed funding increase of \$100,000 will help the Bureau of Indian Affairs control tamarisk on 4,000 acres. Finally, USGS proposes two additional research projects in direct support of land management efforts, including the development of protocols and measures to prioritize sites for control and revegetation efforts.

In addition, both Interior and Agriculture agencies are working together with our state and local partners to develop and implement control technologies as part of an integrated approach to pest and weed management. New chemical and biological control methods for tamarisk are being tested under strictly controlled conditions because the endangered southwest willow flycatcher occupies areas now infested with tamarisk that were once occupied by stands of native willows and cottonwoods. The Federal agencies are providing support for a multi-pronged approach to tamarisk control utilizing prevention, early detection and rapid response, and other control and management activities to limit the introduction and spread of tamarisk into new areas of the Southwest.

*Coordinated Tamarisk Control and Revegetation Workshop*

As a means of deciding how to spend the FY 2004 funds proposed in the President's Budget for tamarisk control, the Department is considering a strategy workshop to be held in the West sometime this fall. The purpose would be to gain stakeholder input for a roadmap containing common protocols (decision criteria) and best practices for tamarisk control and management. The roadmap would provide guidance for selecting on-the-ground projects and research efforts with the twin goals of generating increased water supply and restoring ecosystems through long-term tamarisk control, revegetation, and habitat recovery.

*Departmental Views on H.R. 2707*

I hope that this overview has provided you with a picture of what the Department is doing to manage the control of tamarisk and other harmful exotic species. With the above discussion in mind, let me briefly turn to H.R. 2707.

The "Salt Cedar and Russian Olive Control Demonstration Act" establishes a two-pronged approach to control of these species. Section 3(a) of the legislation would require the Secretary of the Interior, in consultation with the Secretary of Agriculture, to complete an assessment of the extent of infestation by these species in states where the Bureau of Reclamation operates. The assessment is also to include past and present assessments and management options to control these species; the feasibility of reducing water consumption; methods and challenges in land restoration; and the estimated costs of destruction, biomass removal, and restoration and maintenance. Finally, the assessment is to identify long-term funding strategies that could be implemented by Federal, state, and private land managers.

We view a comprehensive assessment positively, and believe such an approach helps Federal land managers develop a more coordinated, long-term approach to addressing the problems associated with these species. While we agree with the goals of the bill, we have concerns with some provisions.

Subsection 3(b) of the bill would require that the Secretary initiate demonstration projects to determine the most effective control methods, and provides certain criteria that must be included in the project designs. As noted above, the Department is currently working with our partners to develop and implement an integrated approach to management of this species. We recognize the importance of carrying out strictly controlled projects that will quickly provide us with practical control methods that can be used by our land managers on the ground. We note, however, that the language of this subsection, particularly when viewed in combination with subsection 2(a) and subsection 3(d), does not make clear which Secretary would initiate the program. We suggest that this language be clarified.

The legislation would also authorize \$25 million for each of fiscal years 2004 through 2007, though the bill does not provide sufficient direction on how the appropriated funds are to be distributed. The Department also has a concern about the overall cost of the programs created under the proposed legislation. While the Administration's cross cut budget evidences our commitment to control invasive species like those addressed here, the program established under this legislation would have to compete with other priority activities within the context of the President's Budget. Finally, the Department notes that the actions called for in H.R. 2707 can be achieved within existing authorities.

#### *Conclusion*

In closing, I want to assure the Committee that the Department is prepared and committed to identifying, assessing, and acting to curb the economic and ecological impacts of tamarisk and Russian olive in the West. We will continue to work with our partners, and we agree with the intention of H.R. 2707 to more systematically develop a more effective control strategy. Our goal is to ensure the protection of our water resources and the restoration of important wildlife habitat.

We share the Committee's concerns and interest in this issue, and offer to work with the Committee to ensure that any legislation promotes an efficient and effective control strategy. Mr. Chairman, this concludes my statement and I am happy to answer any questions that you might have.

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Mr. MCINNIS. Thank you, Mr. Tate. And I think the field hearing is very appropriate. It is going to be helpful, but I—though I would like to have it in Colorado. I understand it is being in New Mexico, and I think that is also very appropriate.

Let's see. We will go ahead now. I am going to excuse you, but I would appreciate it if you would stay around just long enough for questions after the next panel. I will go ahead and excuse Ms. Estill and Mr. Tate, and would ask the second panel to come on up. We have Tim Carlson, Dr. Redifer, Mr. Davis, Mr. Kershaw, Mr. Sulnick.

Mr. Carlson and Dr. Redifer, I hope I beat you to Grand Junction tomorrow, but I am afraid I probably won't. It is getting a little warm out there, huh?

Mr. Carlson, why don't we go ahead and start with you. You may proceed.

And by the way, I want to thank all of you for traveling this distance to testify. And again, what is very important here is the words that we get put into the permanent record, because this issue is a very critical issue that directly addresses the droughts that we are facing out there in the West.

Go ahead, Mr. Carlson.

#### **STATEMENT OF TIM CARLSON, EXECUTIVE DIRECTOR, TAMARISK COALITION**

Mr. CARLSON. Mr. Chairman and members of the Committee, thank you for this opportunity to present testimony before your Committee on the important issue of salt cedar and Russian olive control in the West.

My name is Tim Carlson. I am executive director of the Tamarisk Coalition. The coalition is a nonprofit organization that represents a wide variety of interests throughout the Southwest, including land managers, cities and counties, environmental organizations, water conservation districts, farmers and ranchers.

The mission of the Tamarisk Coalition is to provide education on the problem of the non-native invasive plant tamarisk—it is also known as salt cedar, so any time both words are used, it really

means the same plant. It is also to help develop long-term management and funding structures to control its infestation. Although salt cedar is a primary invasive plant—we call it the poster child of non-native plants—impacting western rivers, other plants, notably Russian olive, cohabit with salt cedar and should be part of any river restoration action.

The legislation introduced by Mr. Pearce includes significant on-the-ground demonstration projects. I would like to concentrate on five points that emphasize the importance of these large-scale demonstrations beyond the obvious benefits of site-specific salt cedar control and restoration.

First, the demonstrations serve to help answer critical questions on what will be the true changes that will result after salt cedar control and restoration takes place; that is, the changes to water availability, both in the surface and ground water supplies, changes to water quality, changes to wildlife habitat, and biodiversity changes. Because these research activities go beyond single demonstrations at any single site in any State and will involve many Federal scientists, we encourage that research efforts that are tied to these demonstrations be 100 percent Federally funded.

Second, our partners have identified four important issues. These issues include maintaining respect for existing State water laws and water rights; respect for private property rights; respect for existing infrastructure, such as water storage and delivery systems; and respect for endangered species. We believe that the large-scale demonstrations will show that salt cedar control and restoration can be successful and at the same time be supportive of these issues. In fact, both water rights and endangered species recovery should be enhanced under well designed demonstrations. This would be especially true for the endangered fish species in the Upper Colorado River.

The third point is demonstrations will not solve the salt cedar problem. The salt cedar problem is much larger than what this bill can provide funding for. However, the demonstrations can be used as an educational and cooperational tool to help develop the strategies for long-term management and funding for salt cedar control.

Fourth, the demonstrations can also be used to support international cooperation on salt cedar control between the U.S. and Mexico by including at least one border demonstration.

Fifth, the demonstrations can also serve to foster work experience for youth through existing programs such as Youth Conservation Corps, AmeriCorps, and related State, Native American, and local youth programs.

Finally, the question has to be asked, what will the public gain from these efforts? From a cost standpoint, salt cedar control and restoration is really low-hanging fruit. Preliminary cost estimates would indicate that long-term gains are 5 to 20 times less costly than new storage, water recycling, conservation, or expensive desalination programs.

Beyond improving the abundance of water, the other important side benefits of salt cedar control and riparian restoration are: Water quality will be enhanced; wildlife habitat will be improved; there will be greater biodiversity among both plants and animals; and there will be improved conditions for human enjoyment of the

river systems. The value of the improved viability to the West's rivers is difficult to measure in terms of dollars, but is considered to be highly significant.

We believe that this legislation provides an appropriate level of effort to help gain protection of the West's limited water resources and riparian habitats from the infestation of salt cedar and Russian olive. The Tamarisk Coalition encourages Congress to pass and fund this legislation.

Thank you for this opportunity to speak before this Committee.  
[The prepared statement of Mr. Carlson follows:]

**Statement of Tim Carlson, Executive Director, Tamarisk Coalition**

Dear Mr. Chairman and Members of the Committee:

Thank you for this opportunity to present written testimony before your committee on the important issue of Salt cedar and Russian olive control in the West.

The mission of the Tamarisk Coalition is to provide education on the problem of the non-native invasive plant Tamarisk, which is also known as Salt cedar, and to help develop long-term management and funding structures to control its infestation. Our goals are the restoration of native habitat to the West's rivers and streams, and the preservation of its water resources for beneficial uses.

The proposed legislation, H.R. 2707—Salt Cedar and Russian Olive Control Demonstration Act, is an extremely important and needed piece of legislation. While the Salt cedar problem has been identified as a significant problem for almost 50 years, it has taken the drought of the past several years to gain widespread acceptance that solving this problem should be an important component of the West's water management strategy. H.R. 2707 provides significant on-the-ground demonstration projects that will help to answer critical questions on potential changes to water availability, water quality, habitat, and biodiversity. The legislation also identifies the critical issue of developing long-term management and funding strategies that could be implemented by Federal, State, local, and private land managers.

The Tamarisk Coalition believes that this legislation provides an appropriate level of effort to help gain protection of the West's limited water resources and riparian habitats from the infestation of Salt cedar and Russian olive. This written testimony is divided into three sections that provide a background on the problem, suggested changes to the legislation, and important issues to consider.

*Background*

Salt cedar is the primary non-native phreatophyte of concern in the West and thus has the dubious distinction as the "poster child" of non-native plants impacting the riparian zone of rivers and streams. Other plants, notably Russian olive (*Elaeagnus angustifolia*), co-habit with Salt cedar and also deserve attention. Therefore, within the context of this testimony, whenever the term "Salt cedar" is used, one must also consider Russian olive as the other principal invasive plant that may be important to control within riparian areas.

Impacts—Salt cedar (*Tamarix* spp.) is a deciduous shrub/small tree that was introduced to the western U.S. in the early nineteenth century from Central Asia and the Mediterranean for use as an ornamental, in windbreaks, and for erosion control. Salt cedar is well suited to the hot, arid climates and alkaline soils common in the western U.S., and has escaped cultivation to displace native vegetation. It gradually became naturalized along minor streams in the southwest and by the mid-twentieth century, Salt cedar stands dominated low-elevation (under 6,500 feet) river and stream banks from Mexico to Canada. Salt cedar is now believed to cover anywhere between 1.0 and 1.5 million acres of land in the western U.S. and may be as high as 2 million acres (Zimmerman 1997). The severe impacts on riparian systems that this infestation causes throughout the West include (Carpenter 1998, DeLoach 1997):

- Salt cedar populations develop into dense thickets, with as many as 3,000 plants per acre that can rapidly displace all native vegetation (e.g., cottonwoods and willows).
- As a phreatophyte, Salt cedar invades riparian areas, leading to extensive degradation of habitat and loss of biodiversity in the stream corridor.
- Excess salts drawn from the groundwater by Salt cedar are excreted through leaf glands and are deposited on the ground with the leaf litter. This increases soil salinity to levels that kill saline intolerant willows and other plants and prevents the germination of many native plants.

- Salt cedar seeds and leaves lack nutrients and are of little value to wildlife and livestock.
- Leaf litter from Salt cedar tends to increase the frequency and intensity of wildfires which tend to kill many native plants but not Salt cedar.
- Dense stands on stream banks may gradually cause narrowing of the channel and an increase in flooding. Channel narrowing along with Salt cedar-induced stabilization of stream banks, bars, and islands lead to changes in stream morphology, which can impact habitat for endangered fish.
- Dense stands affect livestock by reducing forage and prevent access to surface water.
- Aesthetic values of the stream corridor are degraded, and access to streams for recreation (e.g., boating, fishing, hunting, bird watching) is lost.

While each of these points is important to one or more constituencies, the single most critical problem is that Salt cedar uses significantly more water than native vegetation that it displaces. This non-beneficial user of the West's limited water resources dries up springs, wetlands, and riparian areas by lowering water tables (Carpenter 1998, DeLoach 1997, Weeks 1987). As Salt cedar moves into adjacent upland habitats through the aid of its deep root system, it consumes even more water as it replaces the native grass/sagebrush/rabbit brush communities (DeLoach 2002). Zaveta (2000) demonstrates that a program of Salt cedar control and revegetation would have clear economic, social, and ecological benefits. The National Invasives Species Council has identified Salt cedar as one of its primary targets, most western states have listed it on their noxious weed list, and Colorado Governor Bill Owens has issued an Executive Order to control Salt cedar on public lands within ten years.

**Water Usage by Different Vegetative Types**—Limited evidence indicates that water usage per leaf area of Salt cedar and the native cottonwood/willow riparian communities may not be that different. However, because Salt cedar grows into extreme thickets, the leaf area per acre may actually be much greater; thus, water consumption would also be greater on an acre basis (Kolb 2001). Probably the most insidious aspect of Salt cedar and its consumption of water is that its much deeper root system (up to 100 feet compared to healthy cottonwoods and willows stands at 6 feet (Baum 1978, USDI-BOR 1995)) allows Salt cedar to grow further back from the river and thus can occupy a larger area and use more water across the floodplain than would be possible by the native phreatophytes. This is especially significant, because the adjacent uplands and floodplain typically occupy a cross-sectional area several times that of the riparian zone. In these areas, less dense areas of mesic plants can be replaced by Salt cedar resulting in overall water consumption several times that associated with these other plants (DeLoach 2002).

From thirteen different studies conducted between 1972 and 2000 on Salt cedar evapotranspiration rates, the average water use reported is approximately 5.3 feet per year (Hart 2003). More recent work performed on the Pecos River in Texas over the last three years indicates water use by Salt cedar of 7.7 feet per year (Hart 2003). Recent research by the U.S. Department of Interior on the middle Rio Grande estimates evapotranspiration rates on the order of 4.3 feet per year (Interior 2003). These studies were performed using different methods of measurement, at different locations, and for different densities of infestation. Native cottonwood/willow communities have been estimated to use approximately one foot less per year than Salt cedar (Weeks, 1987) while the native shallow-rooted upland plant communities of grasses, sage, etc. principally use only the moisture received by precipitation. Unpublished research on the Bosque del Apache National Wildlife Refuge on the middle Rio Grande River in New Mexico indicates that Russian olive has very similar evapotranspiration rates as Salt cedar (Bawazir 2003).

**Estimates of Non-Beneficial Water Use**—The term “non-beneficial water use” is defined as the difference in water consumption (evapotranspiration) between Salt cedar and the native plants it has replaced. Estimates on water consumption by Salt cedar vary a great deal depending on location, maturity, density of infestation, and depth to groundwater. This will also be true for the cottonwood/willow community. Using the above information, one can reasonably estimate that this non-beneficial use of water is approximately 1 foot per year for Salt cedar in the riparian areas that could support a cottonwood/willow community and approximately 4 feet per year for the upland areas that could support a native grasses/sage/rabbit brush type of plant community. For the West, it is estimated that one-third to two-thirds of the land currently infested by Salt cedar was formerly occupied by cottonwood/willow communities and that the remaining percentage of land would have been occupied by grasses/sage/rabbit brush type of plant communities. If one takes the estimated infested acreage of 1.0 to 1.5 million acres in the West, the estimated non-beneficial water consumption is approximately 2.0 to 4.5 million acre-feet per year. These

estimated water losses represent enough water to supply upwards of 20 million people (Denver Water Board 2002) or the irrigation of over 1,000,000 acres of land. At a modest infestation rate of only 1% per year, these losses will increase by two-thirds in the next 50 years. These values obviously represent a great deal of water that is being consumed beyond what the valuable native plants would have used. It would be even higher if the areas occupied by other non-native phreatophytes, such as Russian olive were included.

**Costs**—Costs for removal vary depending on the expanse of the infestation, existence of other valuable plant species, and terrain. For aerial helicopter spraying with herbicide the cost is around \$200 to \$250 per acre (Hart 2003, Lee 2002). While aerial herbicide spray is extremely effective in killing Salt cedar, it also kills most other vegetation types. For mechanical mulching and herbicide application the cost ranges from \$300 to \$800 per acre (McDaniel 2000, Taylor 1998, CWCB 2003). For hand clearing and herbicide application the cost can range from \$1,500 to \$5,000 per acre (Tamarisk Coalition 2002). Terrain, access, presence of other native vegetation, etc. all dictate which approach to use. No one approach is right for all situations. The U.S. Department of Agriculture recommends the strategy of Integrated Pest Management that matches the right methods for each situation. Additionally, a new bio-control approach that uses a Chinese leaf beetle is being researched by the U.S. Departments of Interior and Agriculture and may help further to reduce costs (De Loach 2002).

Removal is only part of the cost. Restoration is the other component which is necessary to bring back the right native plants and restore habitat. If the objective is to only kill Salt cedar, other invasive noxious weeds will likely take their place if restoration is not part of the effort. Restoration may occur naturally where native plants are still viable or may require specialized efforts to restore the riparian lands. In general, costs may range from \$50 to \$1,500 per acre.

The Tamarisk Coalition has estimated that the overall cost for control and restoration could average approximately \$250 per acre-foot of water resources recovered (CWCB 2003). As a reference point, the cost of purchasing senior water rights in the Denver, Colorado area is valued at \$4,000 to \$12,000 per acre-foot (Franscell 2002).

Beyond improving the abundance of water, the other important side benefits of Salt cedar control and riparian restoration are 1) water quality will be enhanced, 2) wildlife habitat will be improved, 3) there will be greater bio-diversity among both plants and animals, and 4) there will be improved conditions for human enjoyment of the river systems. The value of this improved viability of the West's river systems is difficult to measure in terms of dollars but is considered to be highly significant.

#### *Suggested Changes to H.R. 2707*

The Tamarisk Coalition offers for consideration the following three suggested changes to the H.R. 2707—Salt Cedar and Russian Olive Control Demonstration Act:

1. Page 3, Line 21: Add the following sentence: "The Secretary shall also identify at least one international demonstration project between the U.S. and Mexico." This addition is important because Salt cedar infestations do not recognize political boundaries, and eventual control will require cooperation between both governments and will aid in meeting international agreements for water delivery.
2. Page 4, Line 20: Change sentence to read: "The Federal share of the costs of any demonstration activity funded under this program shall be no more than 65 percent of the total cost. Research activities associated with demonstrations shall be 100% Federal share." This change is important because critical research issues on water availability, water quality, habitat, and bio-diversity benefit the entire West and are not solely a local issue. Additionally, this type of research will be a collaborative effort between Federal scientists and numerous universities throughout the West that are not project specific.
3. Page 5, Line 10: Add the following sentence: "For demonstration projects, the Secretary is encouraged to award procurement contracts, grants, or cooperative agreements under this section to entities that include Youth Conservation Corps, AmeriCorps, or related partnerships with State, Native American, local or non-profit youth organizations, or small or disadvantaged businesses where appropriate." This change would reinforce the use of youth programs for performing many of the labor-intensive activities associated with control and restoration.



### *Important Issues*

Tamarisk Coalition partners have raised four issues that are important to consider in the overall control of Salt cedar and restoration in the West. They are:

1. **Water Rights**—The control of Salt cedar should improve both groundwater and surface water supplies in the future. This is not the creation of new water but rather the prevention of a non-beneficial use of water and, therefore, no new water rights should be implied. Respect for existing state water law and water rights are important to maintain.
2. **Property Rights**—While private property owners are some of the strongest supporters of this legislation, it is important to acknowledge that private property rights must be respected.
3. **Existing Infrastructure**—The rivers of the West are highly impacted by man to improve their capability to store and supply water (e.g., dams, irrigation systems) for beneficial use. Existing infrastructure is important for the continuation of these uses and Salt cedar control and restoration should respect these conditions.
4. **Endangered Species**—Protection of endangered species have been viewed in the past as a potential obstacle to Salt cedar control. This is not the case. The Final Southwestern Willow Flycatcher Recovery Plan (U.S. Fish and Wildlife Service 2002) does provide management approaches that will allow staged removal of Salt cedar and restoration to occur. The Upper Colorado River Endangered Fish Recovery Program also recognizes the impacts Salt cedar has had on river structure and its subsequent impact on fish breeding opportunities. The Endangered Fish Recovery Program is working directly with the Tamarisk Coalition to develop compatible Salt cedar control and restoration strategies that will enhance fish recovery.

The value of well designed demonstration projects authorized under H.R. 2707 is that these projects will help to demonstrate that Salt cedar control and restoration can be successful while maintaining respect for water rights, property rights, existing infrastructure, and endangered species.

The Tamarisk Coalition encourages Congress to pass and fund this legislation to help preserve the limited water resources of the West and to help restore riparian habitat. Thank you for this opportunity to present testimony before your committee.

### REFERENCES

- Baum, B. R. 1978. The Genus *Tamarix*. Israel Academy of Sciences and Humanities, Jerusalem. 209 pp.
- Bawazir, A.S., New Mexico State University, Personal communication, April 2003.
- Carpenter, A. 1998. Element Stewardship Abstract for *Tamarix ramosissima* Lebedour, *Tamarix pentandra* Pallas, *Tamarix chinensis* Loureiro, and *Tamarix parviflora* De Candolle. The Nature Conservancy, Arlington, Virginia.
- CWCB 2003, Colorado Water Conservation Board, "Impact of Tamarisk Infestation on the Water Resources of Colorado", May 30, 2003, prepared by the Tamarisk Coalition.
- DeLoach, J. 1997. Effects of Biological Control of Saltcedar (*Tamarix ramosissima*) on Endangered Species: Biological Assessment. U.S. Department of Agriculture, Temple, Texas.
- DeLoach, J., R Carruthers, J. Lovich, T. Dudley, and S. Smith, 2002. "Ecological Interactions in the Biological Control of Saltcedar (*Tamarix* spp.) in the United States: Toward a New Understanding"—Revised.
- Denver Water Board, 2002. "Denver Water Comprehensive Annual Financial Report 2001".
- Franscell, R., Denver Post, Drought years plumb the depths of water rights, Conflicts inevitable in self-policing system based on prior claims, September 10, 2002.
- Hart, C.R., Texas A&M, Personal communication on the Pecos River Ecosystem Project. March 2003.
- Kolb, Thomas E. 2001 "Water Use of Tamarisk and Native Riparian Trees." Proceedings of the Tamarisk Symposium, September 26—27, 2001, Grand Junction, Colorado.
- Lee, B., Northstar Helicopter. Personal communication, August 2002
- McDaniel, K.C., and Taylor, J.P. Saltcedar Recovery After Herbicide-burn and Mechanical Clearing Practices, New Mexico State University and U.S. Fish and Wildlife Service. 2000
- Tamarisk Coalition, 2002. "National Fish and Wildlife Foundation—Pulling Together Initiative Final Report on Tamarisk control in the Upper Colorado River", Project # 2001-0028-006.

- Taylor, J.P., and McDaniel, K.C. Restoration of Saltcedar (*Tamarix* sp.)—Infested Floodplains on the Bosque del Apache National Wildlife Refuge. *Weed Technology*, 1998, Volume 12:345-352
- Weeks, E., H. Weaver, G. Campbell and B. Tanner, 1987. Water use by saltcedar and by replacement vegetation in the Pecos River floodplain between Acme and Artesia, New Mexico. U.S. Geological Survey, Reston, Virginia.
- USDI-BOR 1995. "Vegetation Management Study: Lower Colorado River, Phase II." U.S. Department of Interior, Bureau of Reclamation, Lower Colorado River, Draft Report, Boulder City, Nevada.
- U.S. Department of Interior personal communications, 2003
- U.S. Fish & Wildlife Service, "Southwestern Willow Flycatcher (*Empidonax traillii* extimus) Final recovery Plan", August 2002.
- Zavaleta, E., 2000. "Chapter 12—Valuing Ecosystem Services Lost to *Tamarix* in the United States; Invasive Species in a Changing World", Mooney, H. A. and R.J. Hobbs (eds.) Island Press, Washington, D.C.
- Zimmerman, J. 1997. Ecology and Distribution of *Tamarix chinensis* Lour and *T. parviflora* D.C., Tamariccea. Southwest Exotic Plant Mapping Program, U.S. Geological Survey.

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Mr. McINNIS. Thank you, Mr. Carlson.  
Dr. Redifer?

**STATEMENT OF JOHN REDIFER, Ph.D., DEPARTMENT OF  
SOCIAL AND BEHAVIORAL SCIENCE, MESA STATE COLLEGE**

Mr. REDIFER. Good morning. My name is John Redifer. I am an associate professor of political science at Mesa State College and vice president of the Tamarisk Coalition. I am also a past chair of the Mesa County Democratic Party, and have worked closely with Representative McInnis and his staff on the bipartisan issue of tamarisk control for the past several years.

I would like to thank Chairman McInnis for inviting me to testify today. The congressman has never turned down the numerous requests from me to visit my classes at Mesa State, and I am grateful for this opportunity to return the favor.

I would also like to thank Congressman McInnis as well as Congressman Pearce, Senators Domenici and Campbell for the leadership that they have provided in our efforts to control tamarisk.

The recent drought and the water-stealing capacity of tamarisk have heightened the need to finally bring this invasive species under control. In the event that we have forgotten, the drought ravishing the American West has reminded our communities of just how precious and scarce water is in our part of the world. At the same time, record drought conditions have forced policymakers to more fully grasp the importance of maximizing the availability of this scarce commodity. Eradicating the pervasive presence of tamarisk along our rivers and streams should be a central component of our region's broader push to increase the availability of water.

And so I want to applaud Congressmen Pearce, McInnis, and other sponsors of legislation for introducing the Salt Cedar and Russian Olive Control Demonstration Act. The demonstration projects identified in H.R. 2707 and the rest of the funding it provides for eradicating tamarisk are a great start to addressing the problem. However, the benefits of this bill are likely to erode over time if Congress fails to ensure that affected river basins infested with tamarisk have in place an adequately funded long-term management strategy that will not only eradicate existing tamarisk but

will revegetate the infested areas and monitor them for any signs of reinfestation over time. We already know how to kill tamarisk, but this tree is extremely resilient and will quickly return if we don't have in place the means and the methods to ensure its total and complete demise.

As currently written, H.R. 2707 acknowledges the importance of long-term management and funding strategies, but more could be done in the bill to assure that stakeholders at the Federal, State, and local levels establish and fund systematic tamarisk control programs. The lack of a systematic multi-stakeholder management and funding strategy is the single greatest hurdle that must be overcome if tamarisk is to be controlled over the long term. The National Invasive Species Council agrees that these two factors are the primary impediments to the control of not only tamarisk, but most invasive species. Without a long-term management and monitoring regime, Federal, State, and local authorities will spend millions of dollars chopping down these water-thirsty trees in the near term, only to see tamarisk reassert their control over the West's waterways in the long run.

I would encourage this Committee to look at H.R. 695, sponsored by Congressman McInnis, for a way to allocate resources for the development of a process model that can assist each river basin as it constructs funding and management strategies. This will make an already strong piece of legislation substantially stronger and more responsive to the challenges that tamarisk pose over the long run.

While I have no preconceived notions on what such a strategy will ultimately look like, I would like to describe a few general principles that any long-term tamarisk strategy should embody.

First and foremost, the strategy must adequately address all three phases of tamarisk control, to include eradication, revegetation, and monitoring.

Second, the strategy must develop and be supported by a coalition of Federal, State, local, and private land managers responsible for implementing it. The war against tamarisk will be won in the trenches, and those that will fight it there must believe that the strategy employed will work. This is best achieved if the stakeholders are implementing a strategy that they have developed.

Third, the strategy should be developed river basin-by-river basin, State-by-State. While the process for developing a strategy may be the same, the strategy itself may differ based on the unique characteristics and political relationships between stakeholders in each river basin.

Fourth, the process for developing strategies should be facilitated by an honest broker—someone the stakeholders do not perceive as trying to force a solution and will allow them to dominate either the implementation of the plan or the funding allocated to it.

Fifth, the strategy must address how resources, money, equipment, and personnel will be pooled to systematically eradicate, revegetate, and monitor the effort to control tamarisk. An effective strategy may require public land managers to dedicate resources under their immediate control to efforts outside their political jurisdictions.

Sixth, the strategy must provide a voluntary, non-coercive means for encouraging local property holders to provide access to their land for the purpose of conducting operations related to controlling tamarisk.

Finally, the strategy must include an educational component designed to create public awareness of the problem and the need to remedy it. Creating public awareness of tamarisk and the benefits associated with its control will be critical to the provision of an adequate funding source. We cannot expect the Federal Government to fund the entire cost of controlling tamarisk. Obviously, the Feds should be responsible for their fair share of the costs, but State and local Governments will have to provide the rest. We must be able to demonstrate to citizens that the benefits of tamarisk control far exceed its costs, and that this effort will be completed in a specific timeframe after which funding will no longer be required. Under these conditions, citizens have demonstrated time and again their willingness to support Government programs.

If we can develop a process that is successful in producing a long-term strategy and funding source, the ramifications will far exceed the problem itself. We will have a process model that can then be exported to deal with the tamarisk problem in other river basins and even other invasive species.

If properly amended to ensure funding for the development of a process model, H.R. 2707 will have the potential to help solve the vast array of problems requiring multi-stakeholder cooperation. Without this systematic multi-stakeholder approach, we will continue to address the problem of tamarisk control in a piecemeal fashion that will most assuredly kill a lot of trees only to see them grow back again.

This concludes my statement. I will be happy to answer any questions.

[The prepared statement of Mr. Redifer follows:]

**Statement of Dr. John Redifer, Associate Professor of Political Science, Mesa State College, and Vice President, The Tamarisk Coalition, on H.R. 2707**

Good morning, my name is Dr. John Redifer. I am an Associate Professor of Political Science at Mesa State College and Vice-President of the Tamarisk Coalition. I am also a past chair of the Mesa County Democratic Party and have worked closely with Rep. McInnis and his staff on the bipartisan issue of tamarisk control for the past two years.

I would like to thank Chairman McInnis for inviting me to testify today. The congressman has never turned down the numerous requests from me to visit my classes at Mesa State and I am grateful for this opportunity to return the favor. I would also like to thank Congressman McInnis as well as Congressman Pearce and Senators Domenici and Campbell for the leadership they have provided in our efforts to control tamarisk.

The recent drought and the "water stealing" capacity of tamarisk have heightened the need to finally bring this invasive species under control. In the event that we had forgotten, the drought ravishing the American West has reminded our communities of just how precious and scarce water is in our part of the world. At the same time, record drought conditions have forced policy makers to more fully grasp the importance of maximizing the availability of this scarce commodity. Eradicating the pervasive presence of tamarisk along our rivers and streams should be a central component of our region's broader push to increase the availability of water. And so I want to applaud Congressmen Pearce, McInnis and the other sponsors of this legislation for introducing the Salt Cedar and Russian Olive Control Demonstration Act. The demonstration projects identified in H.R. 2707 and the rest of the funding it provides for eradicating tamarisk are a great start to addressing the problem.

However, the benefits of this bill will likely erode over time if Congress fails to ensure that affected river basins infested with tamarisk have in place an adequately funded long term management strategy that will not only eradicate existing tamarisk, but will revegetate the infested areas and monitor them for any signs of re-infestation over time. We already know how to kill tamarisk, but this tree is extremely resilient and will quickly return if we don't have in place the means and the methods to ensure its total and complete demise.

As currently written H.R. 2707 acknowledges the importance of long term management and funding strategies, but more could be done in the bill to ensure that stakeholders at the Federal, state and local levels establish and fund systematic tamarisk control programs. The lack of a systematic, multi-stakeholder management and funding strategy is the single greatest hurdle that must be overcome if tamarisk is to be controlled over the long term. The President's National Invasive Species Council agrees that these two factors are the primary impediments to the control of not only tamarisk but most invasive species. Without a long term management and monitoring regime, Federal, state and local authorities will spend millions of dollars chopping down these water-thirsty trees in the near term only to see tamarisk re-assert their control over the West's waterways in the long run. I would encourage this committee to look at H.R. 695 sponsored by Congressman McInnis for a way to allocate resources for the development of a "process model" that can assist each river basin as it constructs their funding and management strategies. This will make an already strong piece of legislation substantially stronger, and more responsive to the challenges that tamarisk pose over the long run.

While I have no pre-conceived notions of what such a strategy will ultimately look like, I would like to describe a few general principles that any long-term tamarisk strategy should embody. First and foremost, the strategy must adequately address all three phases of tamarisk control to include eradication, revegetation and monitoring. Second, the strategy must be developed and supported by a coalition of Federal, state, local and private land managers responsible for implementing it. The war against tamarisk will be won in the trenches. And those who will fight it there must believe that the strategy employed will work. This is best achieved if the stakeholders are implementing a strategy that they have developed. Third, the strategy should be developed river basin by river basin, state by state. While the process for developing a strategy may be the same, the strategy itself may differ based on the unique characteristics and political relationships between stakeholders in each river basin.

Fourth, the process for developing a strategy should be facilitated by an "honest broker", someone that the stakeholders do not perceive as trying to force a solution that will allow them to dominate either the implementation of the plan or the funding allocated to it.

Fifth, the strategy must address how resources; money, equipment and personnel will be pooled to systematically eradicate, revegetate and monitor the effort to control tamarisk. An effective strategy may require public land managers to dedicate resources under their immediate control to efforts outside their political boundaries.

Sixth, the strategy must provide a voluntary, non-coercive means for encouraging local property holders to provide access to their land for the purpose of conducting operations related to controlling tamarisk. Many property owners are understandably suspicious of even the most beneficial government action and a means must be developed to abate those fears. We know that tamarisk does not respect either property boundaries or any other artificial jurisdictional distinctions. Success against tamarisk will only come if affected land owners of every type are equally committed to its eradication. Accordingly, a successful tamarisk suppression program will need to include non-threatening mechanisms that encourage the cooperation of private land owners.

Finally, the strategy must include an educational component designed to create public awareness of the problem, and the need to remedy it. Creating public awareness of tamarisk and the benefits associated with its control will be critical for the provision of an adequate funding source. We cannot expect the Federal Government to fund the entire cost of controlling tamarisk. Obviously, the feds should be responsible for their fair share of the costs but state and local governments will have to provide the rest. We must be able to demonstrate to citizens that the benefits of controlling tamarisk far exceed its costs and that this effort will be completed in a specific time frame after which funding will no longer be required. Under these conditions citizens have demonstrated time and again their willingness to support government programs.

If we can develop a process that is successful in producing a long-term strategy and funding source to control tamarisk the positive ramifications will far exceed the problem itself. We will have a process model that can then be exported to deal with

the tamarisk problem in other river basins and even other invasive species. If properly amended to ensure funding for the development of a "process model", then, H.R. 2707 will have the potential to help solve a vast array of problems requiring multi-stakeholder cooperation. Without this systematic, multi-stakeholder approach, we will continue to address the problem of tamarisk control in a piecemeal fashion that will most assuredly kill a lot of trees only to see them grow back again.

This concludes my prepared statement. I will be happy to answer any questions the committee may have.

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Mr. McINNIS. Thank you, Doctor.  
Mr. Davis?

**STATEMENT OF TOM W. DAVIS, MANAGER,  
CARLSBAD IRRIGATION DISTRICT**

Mr. DAVIS. Mr. Chairman, Committee members, I consider this an opportunity to give you my thoughts on this particular piece of legislation.

I am Tom Davis. I manage Carlsbad Irrigation District, and prior to that I worked for 16 years with the U.S. Forest Service in various capacities throughout the Southwest and the State of Texas.

I want to thank Congressman Pearce for his work in bringing this bill to this stage. I agree with what the testifier just said—a lot of the salt cedar work that has been done in the past has been very piecemeal, and it has been done by some of us that haven't been capable or had the funding to conduct it in such a fashion to really pinpoint all the complexities in the results of the control and the need to revegetate, and our ability to guarantee revegetation has been lacking.

I have had quite a bit of experience the last 15 years in managing salt cedar, but my experience has been limited to the Pecos basin in New Mexico. Pecos basin in New Mexico is considerably different even from the Rio Grande basin in New Mexico, or the Salt River basin in Arizona, or the Wichita River basin in Oklahoma.

So the advantage to this particular piece of legislation is that we look on a broad scale, globally, at salt cedar infestations in a wide range of different biological conditions, and we are able to get at permanently, once and for all settle the issue of not only how do we kill salt cedar—I think we are getting on top of that issue—but how do we reestablish native vegetation, how do we mitigate for some of the benefits that salt cedar serves, in some cases.

I support the goals of H.R. 2707. In particular, what we are doing here is establishing demonstrations, like stated, globally, before we go out and attempt to spend money on large-scale projects that would invariably make some mistakes. These demonstration projects will be able to look at all the what-if situations, determine ways to mitigate for those situations prior to making large-scale mistakes that will invariably damage the ecosystems for a long period of time. Most of salt cedar occur in Southwestern United States and, as you know, Nature is not as forgiving out there as it is maybe back here in the East or in the central area of the United States. When rainfall regimes are below 25 inches, it is very difficult to mitigate for a mistake made. It takes years to do that.

So this demonstration project is so critical that we look at can and can't be done in various ecosystems, various rainfall belts, and I think it is critical that we do this, particularly the—my experience, and I am president of a nonprofit corporation that was established in 1992 to do this very thing. We looked at 5,000 acres of salt cedar, or which 3,800 acres of that was total, 100 percent canopy cover of salt cedar. We did post studies there of—wildlife studies with New Mexico State University, we established monitoring wells, and with the help of Congressman Skeen, a former colleague of this body, we were able to fund this demonstration project. And we struggled for years.

Killing the salt cedar wasn't as difficult as reestablishing vegetation. We found that to be very difficult. We also found, just as the previous witness testified, salt cedar is very resilient. Not only is it difficult to kill, but it is going to come back. Once conditions are favorable again, the seeds are out there by the billions and it is going to come back. So it continually calls for follow-up action to prevent reinfestation. Reinfestation can be controlled somewhat if you get a good established native vegetation in place, which is difficult to do often in our Southwestern regions because of very few years, or favorable years, to reestablishing vegetation. And in looking at this bill, that is one of the main things that is called for in 3(a), is looking at how to not only control the salt cedar, but also look at how to establish revegetation of native vegetation. That is a difficult process, we have found in the past.

Although salt cedar is an exotic species, I am convinced that it may be here to stay, and we may have to figure out a way to keep it in control as much as possible and encourage our native vegetation as much as possible. But it is going to be very difficult in the long term to totally eradicate salt cedar. I think our greatest challenge is how to successfully and economically reestablish the native vegetation and how to prevent salt cedar from reestablishing in areas that we previously controlled it. And I believe that this bill will—the implementation of these demonstration projects will get at that very thing.

I understand that this demonstration, this bill will provide for multiple projects to be conducted in a variety of river systems throughout the western United States. And the importance of this, I believe, is that these demonstrations will be conducted by non-biased professionals, representatives of State and Federal agencies, universities, national laboratories, private contractors. And I think that is what has been needed for a number of years, is to really have a look at this thing by people that really aren't biased one way or the other. Salt cedar control has been sold, I think, as a silver bullet to our water problems in the Southwest in a lot of cases, and I do believe that each salt cedar plant is a small pump that is evapotranspiring water into the atmosphere. But I think that we need to really get at the heart of this issue of water savings and how much water replacement vegetation uses. And this bill will provide for that opportunity with these demonstration projects.

I apologize, Mr. Chairman, for going over my time, but I will be happy to answer any questions at the appropriate time. Thank you.

[The prepared statement of Mr. Davis follows:]

**Statement of Tom W. Davis, Manager, Carlsbad Irrigation District,  
Carlsbad, New Mexico, on H.R. 2707**

I am Tom W. Davis. Since 1987 I have been the Manager of the Carlsbad Irrigation District. For the sixteen years prior to my current employment, I was employed by the U.S. Department of Agriculture Forest Service. During the past fifteen years I have had extensive experience in control and/or management of salt cedar (tamarisk spp.) in the Pecos Basin in New Mexico using chemical and mechanical methods.

In recent years, driven primarily by drought conditions and water demands throughout the western United States, a tremendous amount of interest has been generated in salvaging water by eradicating salt cedar and to a lesser extent, Russian olive. This movement has been promoted by some as the "Silver Bullet" to increasing flowing water and restoring native riparian vegetation in our rivers. It is all too easy to over-simplify the complex nature of river systems and over-promote the possible benefits of salt cedar removal while overlooking the possible unintended negative impacts of such actions or any environmental virtues salt cedar might provide.

However, salt cedar and Russian olive control is not a new concept along the Pecos River. In 1946 Royce Tipton, a hydrologist working with the National Water Planning Board, convinced both the states of New Mexico and Texas to sign the Pecos River Compact appropriating the waters of the Pecos River between the two states. The primary underpinning of this allocation of the flows of the Pecos was the perceived water salvage potential resulting from the eradication of non-native phreatophytes (salt cedar).

Public Law 88-594, 78 Stat. 942 was signed on September 12, 1964 authorizing the Secretary of Interior to carry out a continuing program to reduce non-beneficial consumptive use of water in the Pecos River Basin in New Mexico and Texas. The Bureau of Reclamation was charged with the responsibility of implementing this project. Eventually, 36,000 acres in New Mexico and about 17,000 acres in Texas were mechanically cleared in the Pecos River Flood Plain. The areas originally cleared are maintained as cleared today.

G. E. Welder, a hydro-geologist with the U.S. Geological Survey, completed and published in 1988 the results of a ten-year study attempting to quantify any additional base flows in a specific reach of the Pecos River resulting from eradication of 20,000 acres of salt cedar from that particular reach of the river flood plain. This study was not able to specifically quantify any increases in river base flows, but indicated that evapotranspiration (ET) had been reduced by removing salt cedar from the flood plain vegetation. The study could only speculate as to the fate of any salvaged water made possible by a reduction in ET.

However, in today's environment of increased demands on our river systems, we are obligated to investigate every option to maintain river flows. This legislation provides the opportunity to establish several demonstration projects. These projects will take another look at determining the merits of salt cedar removal, and monitor, measure and track any salvaged water and increased river flows. Using today's technology we must not only attempt to quantify actual water salvaged by reducing ET, but we must be certain of the environmental impacts, monetary costs and effectiveness associated with the different methods of salt cedar and Russian olive control. Also, we must mitigate the unintended consequences of removal of these species and prove reliable methods of re-establishing native vegetation. We must determine how to replace the virtues of salt cedar after its removal, such as stream bank stabilization and nesting sites for birds.

These demonstration projects must be conducted in a variety of river systems throughout the western United States by non-biased professionals, representatives of Federal and state agencies, universities, national laboratories and private contractors. The knowledge gained from these demonstrations will be critical in conducting proper future management of our riparian ecosystems and stabilizing river flows.

This legislation provides for all of these elements and more. I request that you vote in support of this bill.

Thank you for the opportunity to comment on this bill.

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Mr. McINNIS. Thank you, Mr. Davis.  
Mr. Kershaw?



**STATEMENT OF JOHN R. KERSHAW, PRESIDENT, IMPERIAL VALLEY CONSERVATION RESEARCH CENTER COMMITTEE, IMPERIAL COUNTY, CALIFORNIA**

Mr. KERSHAW. Mr. Chairman, I am going to summarize my prepared remarks in the interests of time.

I am John R. Kershaw, a resident of Brawley, California, in Imperial County, where I have been engaged in farming and ranching and agricultural business enterprise for over 40 years. I also serve as president of the nonprofit Imperial Valley Conservation Research Center Committee, a unique partnership between agricultural community and the Brawley Research Station.

I am here today on behalf of the Imperial County Board of Supervisors, chaired by Mr. Joe Maruca, and also from Mr. Stephen Birdsall, who is our ag commissioner, and also he is the one who is spearheading our area's tamarisk control efforts. Mr. Birdsall's office also coordinates a weed management coalition involving his office, Imperial Irrigation District, the California Department of Food and Agriculture, University of California Extension, and the USDA APHIS Agency. This group has targeted tamarisk as a major invasive species for strong controls.

Salt cedar has had a substantial presence in this entire region for many years.

Diversified farming and ranching is a cornerstone to the region's economic base, where you must use innovative approaches to address the increasing demand for a diminishing water supply. As the Members of Congress are aware, Imperial County is experiencing tremendous pressures to reduce its use of Colorado River water, and is engaged in ongoing negotiations dealing with the interests of other areas in their search for additional water supplies.

We feel that by controlling the incredible water thievery of the salt cedar population in the region, and replacing this aggressive invasive plant species with the native plant communities that once flourished therein, the availability of Colorado River water could be increased, along with the restoration of habitats conducive to wildlife.

And of course, the general taxpaying would also benefit significantly from the control of salt cedar through expanded water availability at relatively low cost, versus other means that are being explored in the search for more abundant water resources.

We believe the control of salt cedar can have a relatively fast benefit ratio to augment existing strained water supplies. This water savings no doubt would be significant and should provide a more reasonable and less costly timetable for developing other water resources.

Imperial County Agricultural Commissioner's office and the Brawley Research Station have been building data for some time on ways in which to control salt cedar and the benefits from such an accomplishment.

We know that extensive tests by USDA-ARS have shown the Chinese leaf beetle to be a selective feeder of the species of salt cedar. An APHIS scientist based at the Brawley Research Station has been researching new bio control agents and is excited about the Fish and Wildlife Service opening up the Northern tier above the 37th parallel for bio control releases. He is anxious to begin

testing these agents so selections can be made as to the correct strain.

This same APHIS scientist is also studying the effects of replacing salt cedar with native vegetation on non-target organisms, seeking to determine any collateral defects in data that shows costs and benefits. We feel this is an important area to research as serious salt cedar remediation gets under way—what will be the impacts of the control efforts on non-targets?

The Imperial County ag commissioner's office has been seeking resources to complete a survey and data collection of salt cedar sites identified with GPS coordinates. Target areas are desert springs and oases and riparian areas. The goal is to evaluate these sites for control and restoration projects and determine the best combination of control and restoration methods for the chosen sites, and implement those methods.

On behalf of Imperial County, I want to state support for H.R. 2707. We are grateful to its authors, including Representative Duncan Hunter. Having served as a Member of Congress for 20 years prior to being redistricted fully to the San Luis area, Mr. Hunter has a strong familiarity with our County, its economic base, and reliance on the Colorado River with an acute awareness of the needs to conserve and protect our precious water resource.

We would endorse the Tamarisk Coalition's concern for restricting the Federal support for demonstration projects provided in H.R. 2707 to 65 percent, and we request that the Committee amend the language of H.R. 2707 so that the Federal share of the cost of any activity funded under this program shall be 100 percent of the total cost.

I want to assure the USDA and Department of Interior that the facilities of Brawley Research Station are available to deal with the salt cedar problem, and I am certain the same can be said of the facilities of the ag commissioner's office.

Lastly, I thank the members of this Committee for the opportunity to appear before you, and hopefully, this hearing will lead to the enactment of a demonstration program to assess potential savings through control of salt cedar and Russian olive invasive species.

Thank you.

[The prepared statement of Mr. Kershaw follows:]

**Statement of John R. Kershaw, Imperial County, California, on H.R. 2707**

Mr. Chairman, I am John R. Kershaw, a resident of Brawley, California in Imperial County, where I have been engaged in farming and ranching and agricultural business enterprise for over 40 years. I serve as President of the Imperial Valley Conservation Research Center Committee, a unique collaborative partnership between the agricultural community and the Brawley Research Station where there is always a lively agenda dealing with the invasive species spectrum, ever-evolving exotic crop pests and disease, bio controls, salinity/drainage trials, and water management including remediation and reuse. The Brawley Station has been lauded since its inception in 1951 for an impressive registry of accomplishment dealing with diversified agriculture and water-related research.

I bring you greetings from the Imperial County Board of Supervisors, chaired by Mr. Joe Maruca, and also from Mr. Stephen Birdsall, who is spearheading our area's tamarisk control efforts. Mr. Birdsall's office also coordinates a Weed Management coalition involving his office, the Imperial Irrigation District, the California Department of Food & Agriculture, the University of California Extension, and the USDA-

APHIS agency. This group has targeted tamarisk as a major invasive species for strong management controls.

Imperial County is a hub of the Southwestern desert region whose borders merge compatibly with the great Yuma and Palo Verde Valleys to the East and Northeast, the tremendous Coachella Valley and Inland Empire Counties to the North and Northwest, and the renowned San Diego County complex to the West. Also, we have a strong cooperative relationship, especially in agricultural matters, with our significant Baja California neighbor to the South.

Salt Cedar has had a substantial presence in this entire region for many years.

Diversified farming and ranching is a cornerstone to the region's economic base where we must use innovative approaches to address the increasing demand for a diminishing water supply. As the Members of Congress are aware, Imperial County is experiencing tremendous pressures to reduce its use of Colorado River water and is engaged in ongoing negotiations dealing with the interests of other areas in their search for additional water supplies.

We feel that by controlling the incredible water thievery of the Salt Cedar populations in the region and replacing this aggressive invasive plant species with the native plant communities that once flourished therein, the availability of Colorado River water could be increased along with the restoration of habitats conducive to wildlife. The public would benefit from the greater recreational aspects of these habitats along with a more suitable riparian environmental scenario.

The general taxpaying public would also benefit significantly from the control of Salt Cedar through expanded water availability at relatively low costs versus other means that are being explored in the search for more abundant water resources. I am informed by the International Center for Water Technology at Fresno, CA, that access to useable water is developing into the greatest challenge of this century. We absolutely must develop and deploy new technologies that maximize the effectiveness of water use for urban, environmental, and agricultural application.

As premier and affluent as America is versus most nations, we rank 63rd in the quantity of water among all countries. It is estimated that our water availability per person will drop by one-third in the next 20 years.

Rick Weiss, a news reporter, recently penned an article about how the dwindling of clean, fresh water is forcing scientists to go to such extremes as seismic and core-drilling technologies in search for rivers and lakes said to lie far beneath the surface of the earth—aquifers that contain “fossil” water as much as a million years old.

That's promising but this kind of water development no doubt will be very costly; as will be the desalination of salt water and other means to find greater supplies. It is reliably estimated that some supplemental water supplies can take 20 years or longer to develop and finance.

We believe the control of Salt Cedar can have a much faster benefit ratio to augment existing strained water supplies. This water savings no doubt would be significant and might provide a more reasonable and less costly timetable for developing other water resources.

The Imperial County Agricultural Commissioner's Office and the Brawley Research Station have been building data for some time on ways in which to control Salt Cedar and the benefits from such an accomplishment.

We know that extensive tests by the USDA-ARS have shown a leaf beetle, *Diorehabda elongata*, to be a selective feeder of a species of Salt Cedar. An APHIS scientist at the Brawley Research Station has been researching new bio control agents and is excited about the Fish & Wildlife Service opening up the Northern tier above the 37th parallel for bio control releases. He is anxious to begin testing these agents so selections can be made as to the correct strain.

This same APHIS scientist is also studying the effects of replacing Salt Cedar with native vegetation on non-target organisms, seeking to determine any collateral defects and data that shows costs and benefits. We feel this is an important area to research as serious Salt Cedar remediation gets underway—what will be the impacts of the control efforts on non-targets?

As mentioned earlier, systematically reducing the abundance of Salt Cedar would allow the presently depressed native plant communities of western riparian areas to recover and also encourage wildlife populations to increase, including several species that are declining, are threatened or endangered.

One such bird is the endangered Southwestern subspecies of the Willow Flycatcher. While this bird utilizes the Salt Cedar for habitat, the Salt Cedar also displaces other native plants which harbor insects important to the Flycatcher's diet.

The Imperial County Agricultural Commissioner's Office has been seeking resources to complete a survey and data collection of Salt Cedar sites identified with GPS coordinates. Target areas are desert springs/oasis and riparian areas. The goal

is to evaluate these sites for control/restoration projects and determine the best combination of control and restoration methods for the chosen sites and implement those methods. This would include: biological, herbicides, cutting followed by herbicide treatment on stumps, mechanical removal by cutting or bulldozing, flooding, burning. Additionally, partial cutting would be followed by burning and competition by supporting regrowth of native plants. Mr. Birdsall's plan would involve monitoring to assess the project's success.

I am refraining from referencing much of the diagnostics relative to tamarisk including the estimated water-extortion of this facultative phreatophyte owing to the belief that representatives of the Forest Service and Department of Interior or others at today's hearing will provide these insights and explanations.

However, we feel our region is victimized by the incessant expansion of this plant species. Its naturalization along the Colorado River and our important farming and ranching areas contributes to increased salinity of surface soil that renders it inhospitable to native plant species, lowers surface water tables, and uses more water than the native habitats it displaces.

On behalf of Imperial County, I want to state support for H.R. 2707. We are grateful to its authors, including Representative Duncan Hunter. Having served as our Member of Congress for 20 years prior to being redistricted fully to the San Diego area, Mr. Hunter has a strong familiarity with our county, its economic base, and reliance on the Colorado River with an acute awareness of the need to conserve and protect our precious water resources.

We would endorse the Tamarisk Coalition's concern for restricting the Federal support for demonstration projects provided for in H.R. 2707 to 65 percent. We believe the need to deal such an obvious depletor of a precious resource would be justification for the Federal treasury to support these projects in the totality of their expenses. Therefore, we request that the Committee amend the language of H.R. 2707 so that the Federal share of the costs of any activity funded under this program shall be 100 percent of the total cost. Our need to deal with the Salt Cedar problem is among the greatest of any area but our economic condition is among the poorest of many areas, especially in the State of California.

Further, I thank the Members of this Committee for the opportunity to appear before you and hopefully this hearing will lead to the enactment of a demonstration program to assess potential savings through control of Salt Cedar and Russian Olive invasive species.

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Mr. McINNIS. Thank you, Mr. Kershaw. I might mention that Mr. Hunter has been very helpful with the Committee on this particular issue. As you know now, of course, he chairs the Defense Committee. I am trying to get him to send a few military weapons. Maybe we could wipe the whole thing out. But they are a little more destructive than we probably want at this point, to deploy. But anyway, I do want you to know Mr. Hunter has been very helpful to the Committee.

Mr. Sulnick, you may proceed.

**STATEMENT OF BOB SULNICK, CAMPAIGN MANAGER,  
ALLIANCE FOR THE RIO GRANDE HERITAGE**

Mr. SULNICK. Mr. Chairman, members of the Committee, thank you for the opportunity to testify.

My name is Robert Sulnick. I am the campaign manager for the Alliance for the Rio Grande Heritage. Our organization spans a distance between southern Colorado throughout New Mexico and into Texas. Our members include Amigos Bravos, Audubon, Defenders of Wildlife, Forest Guardians, Land and Water Fund of the Rockies, New Mexico PIRG, Rio Grande Restoration, Rio Grande/Rio Bravo basin Coalition, San Luis Valley Ecosystem Council, Southwest Environmental Center, the Sierra Club, and World Wildlife Fund. Alliance members have worked on salt cedar-Russian olive removal throughout the Rio Grande basin, including Presidio,

Texas, Socorro, New Mexico, Alamosa, Colorado, and the Albuquerque Reach of the Rio Grande watershed.

Last year, in the New Mexico State legislature, the alliance worked with the New Mexico State Association of Soil and Water Conservation Districts to secure a \$5 million appropriation for salt cedar control and reestablishment of native vegetation and habitat.

The alliance enthusiastically supports H.R. 2707. The approach of undertaking demonstration projects to evaluate the most effective for salt cedar-Russian olive removal is endorsed by the alliance. In our experience, it is particularly important to learn when and how to use targeted aerial spraying and when not to use aerial spraying, particularly in cases where native species or valuable pasture are present. We also, in addition to supporting mechanical spraying, support a pilot project involving the use of goats.

We are particularly pleased with H.R. 2707's attention to monitoring. In our experience, few resources have been provided for long-term monitoring of salt cedar-Russian olive removal projects. Without monitoring, it is impossible to establish a viable approach to solving these problems.

Revegetation with native plants, in our view, is essential if these kinds of projects are to succeed. Absent revegetation and habitat restoration, it has been our experience that invasive species simply return and removal is ineffective.

Finally, the projects to be funded by H.R. 2707 are worth undertaking even if they do not salvage one acre-foot of usable water. Although we would expect and desire a measurable increase in the availability of water to address water shortage problems, in our experience, because of the connection between surface water and groundwater, it is possible that expected gains from eradication will, in some instances, remain in the groundwater system. If such is the case, the resulting elevation of water tables and the benefits to both agriculture and wildlife are well worth undertaking the demonstration projects presented by this legislation.

As a New Mexican, I would particularly like to thank Mr. Pearce for introducing this legislation and Congresswoman Wilson and Congressman Udall for cosponsoring. I would also like to acknowledge the leadership of Senators Domenici and Bingaman in this effort. We wholeheartedly and enthusiastically support the bill.

Thank you, Mr. Chairman.

I would also like to mention that I was married in Golden, Colorado, so I feel some relationship to the Coloradans on the Committee.

[The prepared statement of Mr. Sulnick follows:]

**Statement of Bob Sulnick on behalf of Steve Harris, Chair,  
Alliance for Rio Grande Heritage, on H.R. 2707**

Mr. Chairman, The Alliance for Rio Grande Heritage and its member groups have, over the past seven years, devoted their private resources to the problem of restoring the ecological health and integrity of the Rio Grande in Southern Colorado, New Mexico and West Texas. The Rio Grande problem is a difficult one stemming, as it does, from a century and a half of intensive development and control of land and water resources. Today, we are left with a river transformed by flood control and water diversion projects, a river that occupies only a portion of its historic floodplain and that retains a scant fraction of its natural water flows.

One of the most vexing manifestations of the Rio Grande problem is the dominance of the river's ecosystem by non-native plants. The fertility of the Rio Grande

basin, its ability to produce healthy crops and healthy wildlife has been sacrificed to persistent non-native species, like salt cedar.

In speaking with local people in places like Presidio, Texas, Socorro, New Mexico and Alamosa, Colorado, we hear deep concern about the loss of land productivity from the invasion of salt cedar and a desire to reclaim the ecological and economic benefits of a healthy agro-ecological system, supported by a restored and healthy river.

In the Rio Grande, producers and environmentalists have come together to attempt to address the salt cedar problem. Last year, the Alliance and the state Association of Soil and Water Conservation Districts successfully lobbied a \$5 million appropriation from the New Mexico Legislature for salt cedar control and reestablishment of native vegetative associations. Bosque del Apache National Wildlife Refuge and Santa Ana Pueblo, to cite just two projects in the Middle Rio Grande, that are of the scale contemplated in the present legislation, have become model projects. They are indeed inspiring a growing regional effort to restore the Rio Grande.

We are very pleased that the 108th Congress, with its consideration of H.R. 2707, is addressing this problem, which plagues not only our locality but so much of the West.

In deliberating this bill, we hope the Resources Committee will consider a few reflections from our own experiences:

- The projects to be funded by H.R. 2707 are worth undertaking, even if they do not salvage one acre-foot of useable water. Although we would desire a measurable increase in the availability of water to address the West's water shortages, neither Congress nor restoration practitioners should succumb to unreasonable expectations about the amount of water to be produced.

The connection between surface water and groundwater is quite complex. In our experience, most of the expected gains from eradicating water-consuming non-native plants have remained in the groundwater system, and are not added directly to the useable supplies. What we can be sure of is that the water saved will remain on the landscape, elevating water tables and adding modest amounts to the surface water system. We maintain that the benefits of improved wildlife habitat, restoration of native associations and of land productivity are reason enough to undertake the projects contemplated by H.R. 2707.

- Land restoration resulting from this measure is not apt to be truly successful without attention to restoring some measure of the underlying hydrologic regime. In many cases, it is the loss of seasonal floods in the streams that has most contributed to the dominance of these non-native trees. Projects that fail to address the need of native species for periodic inundation of floodplains have been least successful in terms of self-maintenance of the desirable species and the regrowth of the target species.
- An appropriate portion of the project funding must be devoted to monitoring, not just the water salvage benefit, but the success in restoring the desirable plant associations. We all want to maximize the number of acres restored using the limited funds available. In our experience, there is a tremendous temptation to devote almost no resources to long-term monitoring of the success of these projects, especially the succession of vegetative associations that follow the treatments. We urge this Committee, in its findings to the Congress, to recommend for appropriate monitoring regimes.
- Treatments selected for elimination of invasive species will vary from location to location. We have observed a tendency to over-rely upon aerial herbicide applications because initial per acre costs are lowest. However these treatment methods are not appropriate in a number of cases where native species, valuable pasture or open water is present on the project site. Project proponents should be advised to carefully assess the conditions of individual site and avoid reliance on an expedient, "one size fits all" approach.

Salt Cedar, Russian Olive and other persistent invaders have indeed become a scourge on the West. We have made most progress in reclaiming afflicted lands where we recognize that underlying ecological factors have contributed to our problem, have corrected these conditions and provided hydrologic and soil conditions which will favor the desirable native vegetation over the invasives.

Thank you.

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Mr. McINNIS. Well, we have a lot in common—not in regards to your marriage, but—

Let me—I would like to begin some of the questioning here very quickly.

Mr. Kershaw, one point that I thought maybe you could go into a little more detail, but briefly, for me—you talked about that you were successful in killing the tamarisk, if I am correct. Or maybe it was Mr.—I am sorry, Mr. Davis. I am confused. I apologize, Mr. Kershaw.

You talked about being able to kill the stuff, but it is the revegetation or something else that was difficult. Go through that again very briefly. What—does it poison the soil, or what is happening for getting something else to replace it?

Mr. DAVIS. Mr. Chairman, in our particular demonstration project, we looked at specifically two ways to kill salt cedar—one, mechanically, by root-pling with bulldozers. Keep in mind, this salt cedar was 100 percent canopy-covered and was probably 12 to 15 feet high. Stem diameter was probably on the average of 4 inches. We used aerial application of Arsenal, which is a new herbicide that has only been on the market about, let's see now, about 20 years. In fact, I think we were the first ones in the Carlsbad Irrigation District to use Arsenal as early as 1991—1990, I think, is the first time I used Arsenal to control salt cedar.

Both of those methods are very effective in controlling salt cedar. They have different cost regimes. But I think we know how to kill salt cedar. I think an aerial application of Arsenal with water at the rate of about 15, 18 gallons an acre really gets a good coverage on all the growth tips of the plants and you get a pretty good kill. Root-pling also is effective, maybe a little more effective as far as percent-kill. It is a little more devastating to the ecology because you churn up a lot of ground, a lot of bare ground is exposed. However, that results in a better seed bed.

Now, in the cases we looked at, both the aerial application and the mechanical, in both of those we had equal problems in getting native vegetation reestablished. We spent a significant amount of time and money going back over areas to try to reestablish native vegetation. We had a difficult time doing that. And what we ended up with was an environment out there that was not too conducive to wildlife or to soil stability.

I hope these demonstration projects really focus in on that, because oftentimes we ended up with areas that were fairly destructive. And I blame our situation, difficulty of reestablishing native vegetation, primarily just due to rainfall. I have noticed areas on the Rio Grande where they could actually irrigate. They could dike and irrigate the reestablished native vegetation, whether it is reseeded or pole plantings, they were fairly successful. In our case, we weren't able to do that. We were dependent strictly on what nature provided.

Mr. MCINNIS. The rainfall is the key, you think?

Mr. DAVIS. I think it is the rainfall.

Mr. MCINNIS. All right.

Dr. Redifer, real briefly. I think you suggested you felt there were some modifications to the bill that might improve it. Could you just summarize that for me?

Mr. REDIFER. I would have liked to see that the bill specifically provide funding for development of a process model that would help in the multi-stakeholder approach toward building a long-term management solution. Without that, our efforts to control tamarisk

and Russian olive aren't going anywhere. And so I see this bill as providing an opportunity to kind of provide a boost to this process, some seed money, perhaps, to help show that in one river district or several, we can develop that kind of management strategy, demonstrate that we can effectively control the problem from there. Then you have something you can export. You can send it to other river basins, the process itself. The strategy will look different, as I said in my testimony, depending on the makeup of the river basin and the people playing—the stakeholders involved. But the process could be the same.

Mr. MCINNIS. Thank you.

And Mr. Carlson, real briefly, since I am running out of time, tell me about the rate of speed of the tamarisk and the growth and the tenacity of the plant itself.

Mr. CARLSON. If I understand your question right—

Mr. MCINNIS. For example, let me tell you—on the way to Moab, the Moab canyon there, all the tamarisk that is right along the Colorado River, is that all one root? How long—is it like an Aspen tree?

Mr. CARLSON. A lot of it could be from the same original plant. They have extensive root systems that—some literature would indicate that it goes down to 100 feet in depth, then out to the side over 50 feet. When a plant lays down, if there is moist soil, it will re-sprout from those shoots.

What you saw on the Colorado River going through Moab, that all occurred from the 1984 flood. Remember, that was a time period when Lake Powell was about ready to overtop the dam. And that sent a lot of seed source from, really, Colorado into Utah and in the large wetlands area down there infested nearly 1,000 acres of land down through there. When it gets a chance, it will spread rapidly.

Mr. MCINNIS. Thank you.

And Mr. Pearce, I might remind you, if you have a question, we also have Ms. Estill and Mr. Tate in the audience who would be happy to answer any questions you might have as well.

Mr. PEARCE. Thank you, Mr. Chairman. I mostly want to make a comment that dovetails with Mr. Sulnick's comment about the over-concern with seeing immediate flows at the end of a stream.

In drilling oil wells, you have to—you drill down into the ground, and to keep the drill bit effective, you have to circulate the cuttings back out of the hole, the same as if you got a hand drill, you are drilling into a piece of wood or metal, you occasionally pull it out and you just blow the cuttings out, and that allows your bit to be effective. In drilling oil wells, you circulate fluid.

When we go into fields that have been produced for a long time, you find that a certain hydrostatic pressure is needed at the bottom of the hole. Otherwise, your fluid comes down and goes out into the hole if you don't have a hydrostatic pressure against the hole to cause the fluid to take the path of least resistance.

I suspect what we are finding when we do get rid of the invasive species is that what we are going to do is recharge the aquifers around our streams. I suspect that the streams' aquifers, that invisible piece underneath and on the sides that give hydrostatic push so that the water moves down the stream rather than soaking



out into the aquifer around it, I suspect that we are going to have to recharge those. And I think that we can get very, very concerned, overly concerned with seeing flows at the end of a stream, right now, today. I think we probably have decades of overuse and over-exhaustion of these river systems.

And so we are pretty committed to it because, I mean, you can just look down some of the small streams and rivers into Mexico and there is no way that the vegetation couldn't be soaking up a tremendous amount of the water. But if we think that we are going to have a solution that is immediately evident at the end of the day, I think we would be chasing that a little bit hard.

But we are pretty committed to it, and we appreciate all the testimony here today. I think that a lot of valid points have been made. We have noted some of the concerns and some of the requests for changes in the bill, and I have been talking with my staff as we go along to see what we can do with those. I think all the comments are well-made.

And Mr. Chairman, I appreciate the opportunity to present the bill today.

Mr. MCINNIS. Thank you. And thank you, Mr. Pearce—your hard work is appreciated by many of your neighbors.

With that, that concludes the hearing today. Once again, I want to thank all the witnesses for making a personal effort to be available today. The Committee—

Do you have a request?

Mr. PEARCE. Sorry, Mr. Chairman. I have a couple of letters that I would like to have unanimous consent to insert into the record. Those were letters of support from Pueblo, Santa Ana, and also the Texas Department of Agriculture, that were sent in to Congressman Udall from my State. And with your permission, we would like to insert those into the record.

Mr. MCINNIS. So ordered.

[NOTE: Letters of support for H.R. 2707 have been retained in the Committee's official files.]

Mr. MCINNIS. The Committee now stands in adjournment.

[Whereupon, at 11:05 a.m., the Subcommittee was adjourned.]

